

Marine Corps Gazette

August 1952

thirty cents



Marine Corps Gazette

AUGUST 1952

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Opinions expressed in the Marine Corps GAZETTE do not necessarily reflect the attitude of the Navy Department nor that of Headquarters, United States Marine Corps.

THIS MONTH'S COVER: The sound and fury of men and machines become lost in the arctic. Its ice-covered wastes make the most frenzied activity appear as slow-motion. We believe PFC Magalos has captured this feeling with his cover. **BACK COVER:** Helicopter scouting for ice leads off bow of icebreaker *Burton Sound*.

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MARINE CORPS GAZETTE

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THIS MONTH AND NEXT: In this issue a study of the effect of extreme cold on men and materiel in arctic operations is ably presented in *Trial by Ice*, authored by LtCol Oppenheimer, LtComdr Price, and LtCol Metzger. Facts and figures add up to LtCol Cereghino's conclusion reflected in the title of his *Volunteer Recruiting is the Answer*, page 32, and MSgt Crumb proposes a *Staff NCO School* to provide combat-ready noncommissioned officers. In the September issue the support role of the relatively new 4.5-inch rocket is considered by Lt Bailey, and LtCol Aldridge capitalizes on the Marines' specialized training in his *Amphibious Infiltrations*. The Korean series continues with a report on *Marine Engineers in Korea*.

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TO THE EDITOR

Message Center

Recruiters with Powder-puffs . . .



Dear Sir:

I would like to offer a suggestion that may help the program to enlist women Marines into the Corps. As everyone knows, we need them badly.

First of all, let's face the facts. If you have something to sell, get out and sell it with your best foot forward. A merchant selling apples doesn't put the bad ones on top of the barrel or put undersized strawberries on top of the basket. It isn't that he would try to cheat a customer into buying something that isn't up to par, but merchants have found long ago that the more attractive the item may be, the more chance there is of selling it. The same could apply to women-Marine recruiting personnel.

When you get down to brass tacks you will find there has to be a certain percentage of the old showmanship in selling the Corps to a young girl.

Visualize the woman applicant's first impression when she talks to a woman-Marine recruiter. If the recruiter is attractive, has a trim figure, wears a well fitted uniform and presents a pleasing personality, she can easily begin to break the barrier between the recruiter and the applicant. Properly presented, the uniform, first object of regimentation seen by

the applicant, can practically sell itself if worn by a good looking, neat, and tidy recruiter.

I realize that some recruiting stations have attractive women recruiters on their rolls but too many stations lack the necessary material to present a pleasing model of femininity in their interview room.

The old saying, "beautiful but dumb," need not apply here, for if a girl passes the requirements and has the gear to graduate from recruiter's school she will be far from dumb.

You may say, "Well—where are we going to get these beautiful creatures to properly sell our Corps to the fair sex? The way you talk we will have to import a class of models to do the job!" Look around you, Mac, they're here, right here in our Corps, but probably pounding a typewriter off in a corner of some sergeant major's office. Bring them out in the open, put them on show in Marine offices where the public is encountered. After all, we need women enlistments and to get them we have to advertise with our best.

With an attractive woman Marine in a recruiting office it's a cinch to get picture space in papers, time and time again. One of the first things a photo editor will ask when approached on a picture idea involving a woman Marine is, "Is she photogenic?"

A good looking woman-Marine recruiter will be more noticeable in her recruiting area where she will appear; noticed by women's clubs, high school graduating classes, and reporters, and she will be a cinch to be included in many publicity spreads involving the Armed Forces and agencies such as the Red Cross, Community Funds, and the like. All of this, of course, adds up to getting the word around and putting the sharpest women Marines before prospective applicants.

We women are proud of our Corps and will do all we can to uphold its traditions and sell it to prospective applicants. To sell the Corps to women applicants we must advertise, and to do that properly we should put our best foot forward.

BETTY MARINE,
Sgt, USMCW

Don't Boot Out a Good Shoe . . .

DEAR SIR:

I propose that a careful analysis be given the arrival of the new combat boot and the departure of the old field shoe and that everyone reconsider the possible problems arising from this transition.

There is no doubt in my mind that our new boot is the best that has been developed. The tests to which the Marine Corps Equipment Board put it undoubtedly proved it so.

Each month the GAZETTE pays five dollars for each letter printed. These pages are intended for comments and corrections on past articles and as a discussion center for pet theories, battle lessons, training expedients, and what have you. Correspondents are asked to keep their communications limited to 200 words or less. Signatures will be withheld if requested; however, the GAZETTE requires that the name and address of the sender accompany the letter as an evidence of good faith.



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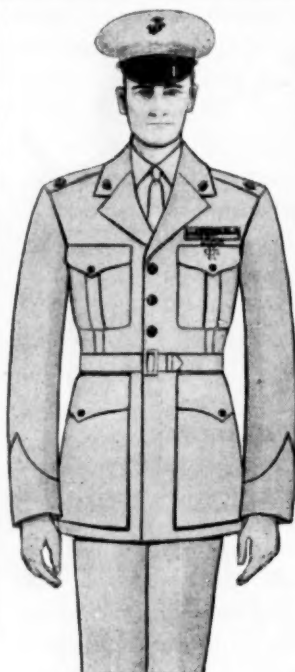
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The need for a combat boot has long been known and recognized. When the present stock of field shoes is exhausted the new boot will replace them. Therefore the problem is apparently solved.

I contend that the problem is just beginning when the supply of field shoes is exhausted. It is felt that combat troops being taken out of the line should have a lighter shoe to get into, to give their feet a well earned rest. There will always be a requirement for a good work shoe. Messmen, truck drivers, and numerous other personnel in service or maintenance type jobs in garrison, and even the infantrymen in garrison, need a good shoe to wear to work. If these personnel are provided with only combat boots I can foresee them cutting the tops off just above the ankle to make them lighter. This is against regulations but it will nevertheless happen—a good pair of boots is ruined. A problem in discipline has also arisen.

The Marine going into the field is already loaded with a tiresome burden on his back. An extra pair of combat boots will make his load even more heavy and bulky and will further tax his limited space for carrying much needed clothing.

In view of the foregoing I propose that present regulations be changed. I suggest that each supply facility be immediately stocked with all sizes of the combat boot for immediate issue and sale; that each Marine be required to have one pair of field shoes and one pair of combat boots; and that the wearing of field shoes or combat boots in the various jobs be at the discretion of individual commanding officers.

W. H. NIMS, JR.,
1stLt, USMCR

Baggage Snafu . . .



Dear Sir:

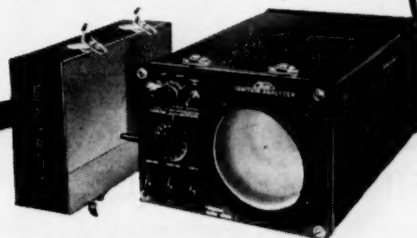
I am writing in hope that something may be done to speed shipments of personal baggage of Korean veterans. Although Marine Corps Bulletin No. 3-52 outlines the procedure for personnel returning from the Pacific Ocean area to claim their baggage, it is felt that very few of these people have access to the above bulletin. Is Marine Corps Bulletin No. 3-52 being read at formations at every post in the Corps? Is enough publicity given the above bulletin? Recently a sergeant on duty with me inquired where to start looking for his seabag which was separated from him in 1950 in Korea. I informed him that in all probability it would be at the baggage center, Camp Pendleton. The sergeant corresponded with the baggage center and in three weeks he had his seabag. No one at

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Yokosuka, Treasure Island, San Diego, or at San Francisco informed him where to inquire for his seabag. Can't publications such as the *GAZETTE*, *Leatherneck*, and others print the instructions every month during the present conflict? Korean veterans should be informed some way. I am sure it would speed shipment of baggage to owners.

J. P. SEPSIS,
TSgt, USMCR

Tell It To The Marines . . .

DEAR SIR:

I read with interest the article *Tell It To The Marines* by Maj Philip N. Pierce in your May edition.

However, I suspect that Maj Pierce is rather maligning Col Drury when he suggested that Drury claimed to be the originator of the phrase "Tell it to the Marines."

I am certain that what Drury meant was that the story he tells giving the origin of the phrase was a "fabrication of his own mischievous brain."

D. B. DRYSDALE,
LtCol, Royal Marines

ED: Col Drury meant what you say he meant, and the author meant what Drury meant.

Grenadiers . . .



DEAR SIR:

One of the most potent weapons available to the rifle platoon commander is very seldom used. That weapon is the rifle grenade. This is not because he does not have a definite use for it but rather is due to the lack of personnel trained to fire the grenade with or without the sighting equipment. Also to be considered is the lack of rifles with sight plates and sights, and the difficulty in carrying the rifle grenades. The majority of infantrymen is trained in only the bare essentials of firing rifle grenades and rare is the man who can fire one accurately. The lack of rifles with sights is caused by the transfer of men out of the platoon at inopportune times, taking their equipment with them. The rifle grenade is a heavy, cumbersome piece of equipment for the rifleman and there is a tendency to discard it when the going gets rough. And suddenly when you need rifle grenades for a job, you find you have none, or if you have them, you don't have anyone who can hit the side of the mountain with one.

Now, there is the problem and here is my solution. I have come up with the idea of forming a fourth squad in the rifle

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platoon—the "Rifle Grenadier Squad." Recommended organization is as follows:

- 1 Sergeant —Squad leader.
- 2 Corporals — Rifle grenadiers. Equipped with M1 rifles and rifle grenade sight plates and sights.
- 4 Privates — Rifle grenade carriers. Equipped with carrying bags constructed to hold six rifle grenades.

One team composed of one rifle grenadier and two rifle grenade carriers should be sent with each of the assault squads.

The rifle grenade is a powerful, accurate weapon, especially the fragmentation grenade with adapter. It has almost the hitting power of a 60mm mortar and is much more accurate when handled properly. With a rifle grenadier squad, the rifle platoon can add more punch up close where it's needed most.

GEORGE E SHEPHERD,
1stLt, USMC

Compulsory Law . . .

DEAR SIR:

Whether we are willing to admit it or not, most of us have far less than a working knowledge of the Uniform Code of Military Justice and its effect on the processes of Naval Law. It seems to me that there should be a correspondence course which would not only be available to interested persons, but would be compulsory for all Marine officers on active service.

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Most likely the Extension Division of the Marine Corps Schools has revised its former sub-courses in Naval Law which were contained in the basic, junior, and senior correspondence courses. If so, perhaps Naval Law could be made available as a special and separate course.

If this isn't practicable, perhaps the Marine Corps Institute could administer such a course in the same way as the much maligned but none the less beneficial Post Exchange Accounting course.

EDWIN H. SIMMONS,
Maj, USMC

ED: The Extension School, MCEC Quantico, has available sub-course B-3, *Naval Justice Under The Uniform Code*.

Dealing With Offenders . . .

DEAR SIR:

The writer of the article *Dealing With Offenders* (GAZETTE, May 1952) states, in substance, that a CO in his initial dealing with delinquents has a solemn duty to primarily consider the good of the service and that of the men, too.

In order to do this fairly and impartially, a CO would have to size up each offender. While this appears reasonable, it would result in the application of more than one scale of justice toward personnel committing the same type of offense, e.g., officer vs. enlisted, or rated vs. nonrated, or male vs. female. I submit that it is easier for a CO to predetermine mentally the punishment the particular offense warrants, to take action after due consideration of all the circumstances, and then to sit tight. This rule of thumb is applicable in units where the CO does not know all of his personnel. Re-stated, if a CO feels a certain punishment is merited by a particular type of offense, he should award the lowest type of court (or mast punishment) than can adjudge such punishment.

It should be noted that the article overlooks several technical aspects in today's administration of justice which did not exist at the time the author's fictional CO held office hours. While not intending to criticize the article, I would like to say that the small unit commander has the ability, through effective leadership, to reduce the number of repeated and recalcitrant offenders.

ROBERT LEVY,
MSgt, USMC

Bad Bunker . . .

DEAR SIR:

The April MARINE CORPS GAZETTE has recently arrived in these parts and contained the usual grand collection of informative and instructive articles.

In perusing this issue, however, I ran across one error which should be corrected. This error appears in the artist's version of an ideal bunker for sleeping and protection (page 21—*Why Build A Bunker?* by 1stLt Witkowski).

This error was commonplace in early bunkers hastily constructed during short periods of defensive action, but was



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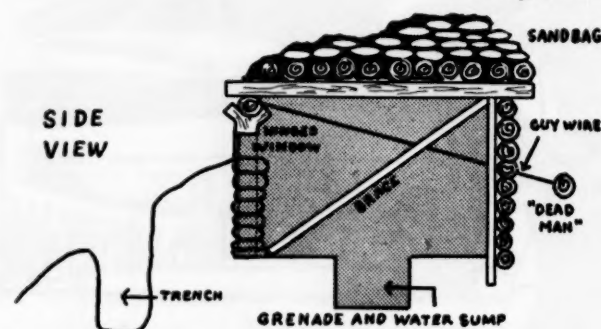
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quickly corrected after several casualties resulted therefrom.

The drawing in question shows the overhead of the bunker supported only by the earth sides of the hole dug for the bunker. Experience has shown that such bunkers collapse under the stress of the tremendous load.

All bunkers, whether for sleeping or fighting, built by this organization must now have upright supports for the overhead. No span of overhead cross beam greater than six feet will be unsupported. In addition, the upright supports must rest on sleepers to prevent settling of the supports and eventual collapse of the overhead.

F. C. BACON,
Maj, USMC



Ed: You're right that our sketch (above) doesn't show sleepers, but we're prepared to make a last-ditch stand on the upright supports.

No Stone Unturned . . .

Dear Sir:

Fortunately, within the last few weeks I have been able to get my hands on your last three issues.

Being an active member of the Army reserve, I am naturally interested in any authoritative and informative publications on Armed Forces activities. Your well-balanced GAZETTE apparently doesn't leave a stone unturned. It is a reflection of the well-earned and well founded Corps esprit.

Your Korea history in series form is a swell idea. Some of the other military publications might take a page out of your book. I'm sure everyone who has read your magazine shares the opinion that staff artist Sgt Packwood deserves a lot of praise for his fine renditions of Marine Corps activities in Korea. Also, having had a chance to read the observations by a Japanese officer on the Iwo battle, may I say "good stuff."

C. L. SHACKFORD, JR.
1stLt, USAR

Cramped for Space . . .

Dear Sir:

It is my belief that with the present integration of hundreds of reservists into the regular Marine Corps, a new service record book page is needed. This proposed page will contain sufficient space to record *all* of a Marine's previous service, active and inactive, plus space for pertinent remarks such as entries regarding time lost.

The present page two of the SRB allows too little space for proper entries as to previous service. There are many present day Marines with more than seven different enlistments, yet but seven lines are allotted to this most important record.

The proposed page will enable commanding officers, clerks, and other interested persons to tell at a glance just what a man's reserve time was—active or inactive. This information is necessary in computing retirement credit, composite scores for promotion, and good conduct medal eligibility. The present page leaves it all a mystery.

In the interests of economy this new page needn't be printed but can be mimeographed locally and may simply be entered in the SRB as a supplement to the present page two.

L. E. REES,
TSgt, USMC

Wants to Swap . . .



Dear Sir:

As we are members of the Netherlands Marine Corps and therefore very interested in the USMC we should be very pleased to become regular readers of the MARINE CORPS GAZETTE. And as the Dutch Government does not reserve funds for this purpose, we have the honour to turn to you, for asking the favour to find us a way to become a regular GAZETTE reader.

We would be very pleased if you were able to bring us in contact with someone who would regularly send us the GAZETTE in exchange for the Dutch Navy magazine *Allehans*.

My friend does not write English, but he is able to read it. I myself would be willing to entertain correspondence with the "someone" who is willing to help us.

PETER WILL,
PFC, Netherlands Marine Corps

Officers' School for Veterans . . .

Dear Sir:

SSgt Long's article, *Don't Sell Experience Short*, in the March issue is quite true.

The Massachusetts National Guard has a school where college graduate veterans can obtain a commission while following their civilian pursuits. The school, named the Massachusetts Military Academy, provides a two-year course along OCS lines. Students devote one complete week-end a month to classes or field exercises as well as having home assignments in between. Those who successfully complete the course are commissioned second lieutenants. The gym, cafeteria, and



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classrooms of one of our local high schools serve as the academy, keeping expenses down to the minimum.

It seems to me that similar schools could be set up in our large centers with little effort. Such a program would furnish an excellent pool of officers for the Reserve and give volunteer officers an opportunity to maintain their efficiency by serving on the staffs.

JOHN I. FITZGERALD, JR.,
LtCol, USMCR

Wire with the Attack . . .

Dear Sir:

In order to overcome failure of radio communications on a recent field problem, we employed the following telephone system with excellent results. I wish to make no claim as to the originality of the system, but I pass it along for whatever value it may be to others.

None of the company's SCR-536 radios were working. The company commander was with the assault platoons. A wire was run from the battalion CP through the company CP and on forward to the company commander in his OP. As the company commander moved forward, the wire moved along with his OP. At the company CP, the wire was cut and an EE-8 phone put on the end going to battalion, while a sound-powered phone was put on the end going forward. The CO then had phone communications with the company CP. When the company CP moved, the two ends were spliced and the advance followed the already laid wire. At the next CP location, which the CO could designate merely by making a knot in the wire, the wire was again cut and the phones connected.

Thus, with no additional effort or supplies, there was continuous telephone communication between the company commander and his CP as well as between the company CP and battalion CP. To point up the value of this arrangement, when the forward air observer's communications failed, he was able to talk over the CO's sound-powered phone directly to SAC by merely joining the wires at the company CP.

DAVID A. CLEMENT,
1stLt, USMC

Read Gellner . . .

DEAR SIR:

SqdrnLdr John Gellner, RCAF, has contributed another fine article for the benefit of GAZETTE readers with *Turkey At The Straits* in the April issue. The fact that the Treaty of Unkiar-Skelessi was conceived in July, 1833 instead of July, 1883—a mistake appearing on page 52, probably typographical, which is made obvious by the subsequent text—is of slight consequence in an overall appraisal of the article.

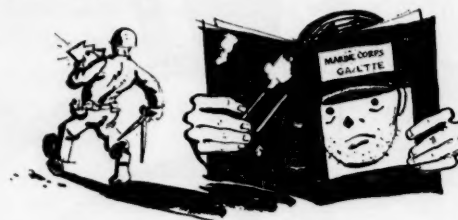
For those Marines who are in search of information regarding Soviet policy and its accompanying application and resultant effects, my advice would be to start by reading Gellner's *Turkey At The Straits* as well as his previous articles in the GAZETTE; to wit, *A Soviet Satellite* (Sept, 1950), *Leaders of World Communism* (Feb, 1950), *Russia's Old Powder Keg*

(Aug, 1951). If there are others of which I am unaware perhaps the editor will be gracious enough to call my attention to them, as I would consider them worthwhile reading.

ROYER "G" WARREN,
Maj, USMCR

ED: Your list is accurate and complete.

Gazette in Korea . . .



Dear Sir:

Having been a reader of the MARINE CORPS GAZETTE, on and off, I would like to be able to receive this very entertaining, enlightening, and educational magazine "as a first."

The fellows here who receive it first have the habit of cutting out certain articles. This, of course, spoils the magazine for the rest.

If it is possible, would you please start my subscription with the February issue, which contains the story, *Japanese Defense of Iwo Jima*, by Y. Horie.

DON HUNTER,
Sgt, USMC

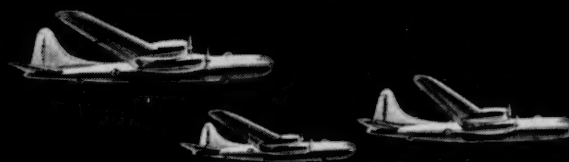
Our Incomparable Marines . . .

Dear Sir:

I have always considered it a privilege to serve (even though just as a medical secretary) in a service hospital. During WW II it was with an Army hospital.

For the past 15 months here in a Navy hospital our incomparable Marines have been more than an inspiration. We had an entire ward of frostbite patients from the Chosin-Hungnam fighting break-through and their "Gung Ho" spirit was superb—as it was all over this sprawling hospital where Marine casualties of all kinds refused to let anything break their spirit or get them down. They were the ones who strengthened the sometimes faltering morale of us "oldsters" when we became depressed over the many tragedies of the latest war—the very young Marine double amputees who said, "Oh, we are the lucky ones!" Their compassion for buddies who were not so "lucky" —"Mullie, why did God have to take both of his legs and both of his hands too?"—not in bitterness but in forgetting their own absence of only one or two limbs in the other's greater loss. And yet the quadruple amputee is making as fine a comeback as the rest of them. And then there was the wonderful Marine who, without bitterness also, said simply, "I've always said that I would give my right arm to be a Marine; and now that I have given it, I can't be one." (He is studying for the ministry.)

During all these months my GAZETTES (as well as *Leather-necks*) have become well worn from being eagerly read by



"BTO"

**-but every hit direct!
using RCA SHORAN**

"BOMBING THROUGH OVERCAST"! Yet RCA SHORAN can determine your position "over target" to an accuracy of better than 50 feet in 100 miles or more—and do it in less time than it takes to tell it.

Developed by RCA for the Air Force to aid blind bombing during World War II, SHORAN is helping to set astonishing records for pinpoint accuracy under conditions where visual bombing would be impossible!

Here's how it works. Two widely separated SHORAN stations on the ground or aboard ship form the base line of a triangle. Your plane is the apex. Pulsed radar signals from your SHORAN are picked up by both ground stations and re-transmitted back to you. On your radar screen you see one "pip" for each station signal. Using calibrated dials, you triangulate these "pips" for your "fix." The operation is done in seconds.

SHORAN development is just one example of the way RCA works in close co-operation with the military services to guarantee U. S. supremacy in electronics. Meet the RCA Engineers and Field Technicians in *your* branch of service.



RADIO CORPORATION of AMERICA
ENGINEERING PRODUCTS DEPARTMENT CAMDEN, N. J.

Marines back from combat. There just never were enough from other sources to go around, so mine were read by many, and I'm proud of their battered condition.

The "old breed" may be disappearing from the "new" Marine Corps, but the basic courage and pride in being a United States Marine will always endure. I've seen it in many places and many climes—from Quantico in 1918 to Marine Corps bases in 1942-47, and now again in 1950-1952.

I cannot end this rambling note without paying tribute to the Navy chaplains, medical officers, and corpsmen of the FMF who have ministered to the Marines so faithfully and so well—and never hesitate to express their admiration for the finest combat troops in the world. They, too, are "tops," and the tie that binds them all together as first-class Americans is strong and enduring.

(MRS.) D. R. JACK,
Oakland, Calif.

Conquest Through Marriage . . .

DEAR SIR:

Congratulations on the publication of Squadron Leader Gellner's most interesting article, *Turkey At The Straits*. It helps to lend emphasis to something that should never be forgotten—that the possession of these waters has been, as it remains, the categorical imperative of Russian policy, whoever may lord it in the Kremlin.

It is, indeed, an obsession that nothing seems to discourage. For on the heels of the Great Powers' concerted and successful effort to arrest the march of the Muskovite armies on Constantinople in 1878, the Russian historian Galzer, referring in his *Abriss der Bysentinischen Kaiserergeschichte* to the fall of Constantinople to Turkish arms in 1453, emphatically affirmed that:

"The month of May dragged the Byzantine Empire finally to its grave. The Greek supremacy had long been a thing of the past; the hollow phantom of it was now to vanish away. But Byzantium had found a mighty heir. The Czar of Russia took a Princess of the House of Palaeologus to wife; the Crown of Constantine Monomachus was placed on the head of the autocrat of all Russia, in the Kremlin. The Russian Empire is *de facto* the sequel to the Byzantine. And if ever St. Sophia is restored to the true faith, and Asia Minor delivered from the Turk, it can only come through the agency of the Czar of Russia. None but the Czar of Russia, 'the Defender of the Orthodox Faith,' and inspired with a sense of the obligations of his great office, can become Emperor of Constantinople."

This is indeed a novel interpretation of dynastic law, which, had it been generally accepted, would have made Kaiser William II of Germany the King of England, on the score of having married a daughter of Queen Victoria!

Incidentally, when the Czar Nicholas repeated his favorite *mot anent* "the Sick Man of Europe" to Chancellor Metternich, that hard-headed realist immediately replied, "Do you speak as physician, Sire, or as heir?"

The adage is not to be questioned—the leopard does *not* change his spots.

REGINALD HARGREAVES,
Maj (ret), British Service

First Man Down The Rope . . .

Dear Sir:

In reading over your very excellent article *Cavalry of the Air*, I noticed two discrepancies which were very obvious to me, as I was in the lead helicopter to land on Hill 882.

Capt Strain and Lt Brannaman did a very good job of presenting the operation on paper. However, I would like to call your attention that the first man down the rope was myself, and Lt Johnson came right behind me.

The other discrepancy is that the authors stated on page 31 that Col Hemphill was G-2, and on page 32 that he was G-3. At the time of Operation Summit, he was G-3.

I am submitting this for the general information of those who are particularly conscious of details.

D. T. LONG,
Cpl, USMC

ED: This indicates *we* could pay a little more attention to details.

The Human Element . . .

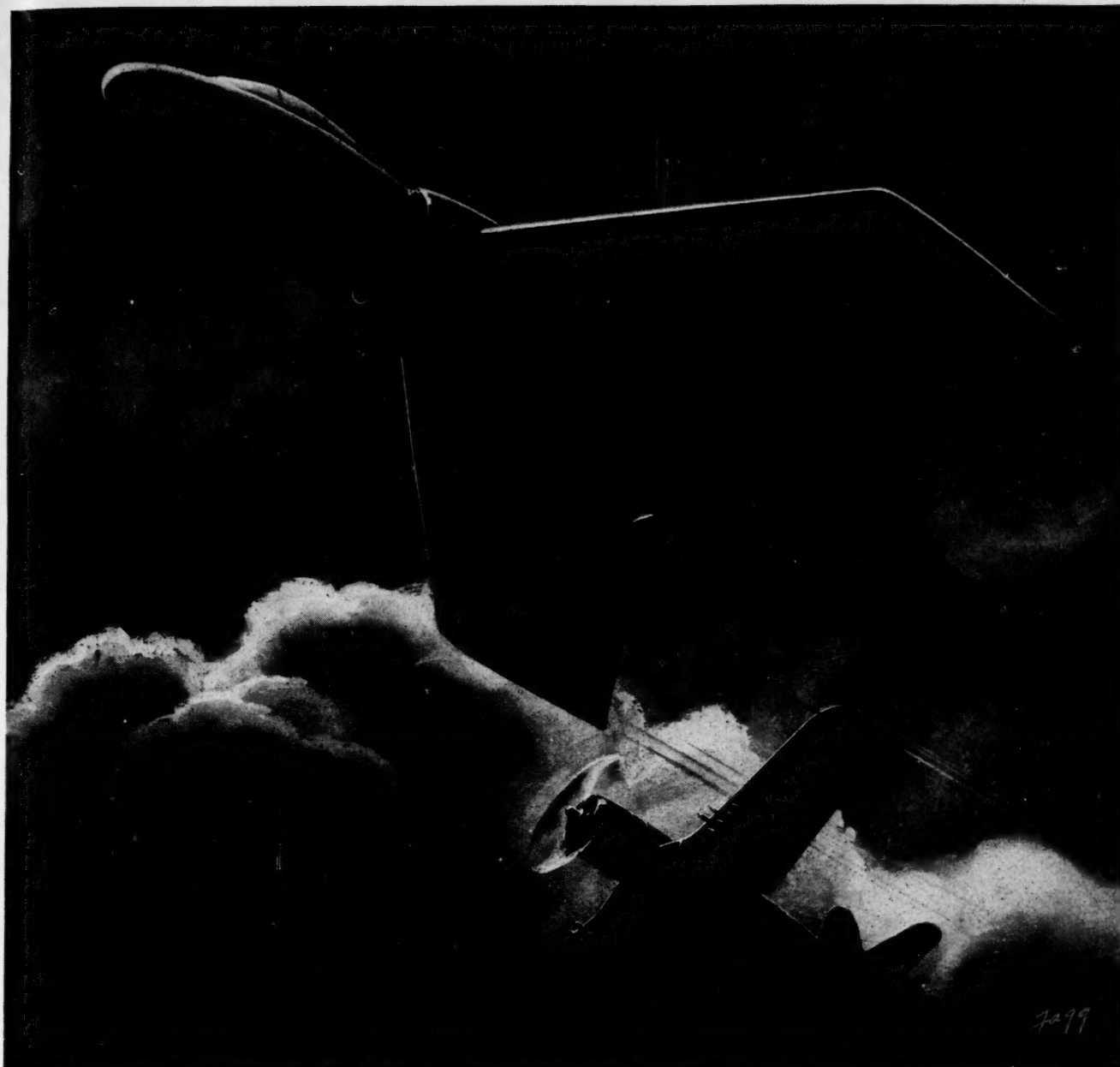


DEAR SIR:

Having spent most of the past six months in recruiting efforts, I must agree wholeheartedly with Lt Ryan's article *Nobody Wants To Be A Fighting Man* (April GAZETTE). This has been borne out time and time again in contacts with prospective recruits, parents, and the general public. In fact, a whole generation has approached the point where it believes that military service is something to be avoided if at all possible. In the unfortunate event that it cannot be done, then the next best thing is to find a "soft" job while in the service. The infantry and other combat arms are only for those who are not "smart" enough to find themselves some other billet.

Unfortunately, the Armed Forces must bear a share of the responsibility for this present public attitude. The period since WW II has been characterized by excessive official publicity concerning the machinery of warfare. Atomic bombs, guided missiles, supersonic aircraft, electronic devices—these are what the public had been led to believe are the materials of modern warfare. Overlooked in the shouting is the basic ingredient—man, the one who must come to grips with the enemy and overcome him if victory is to be realized.

R. F. VAN CANTFORT,
1stLt, USMC



Continuous Progress for 35 Years—

A milestone in aviation history was passed on June 1, 1952. That date marked the 35th anniversary of the founding of Chance Vought Aircraft by the late Chance Milton Vought, one of aviation's most brilliant engineers.

The record of Chance Vought's "firsts" is both long and impressive. The Navy's first aircraft carrier, the U. S. S. Langley, was equipped exclusively with Vought VE-9s. The Vought UO-1 was the first to prove the practicability of catapulting planes from battleships and cruisers; a Vought plane was the first folding-wing monoplane; and the F4U before World War II, was the first 400-mile-an-hour fighter in the country. The history of Naval aviation is filled with countless examples of Vought pioneering . . . pioneering which has been important in helping to make the Navy's Air Arm the world's best.

Today, Chance Vought is producing two outstanding planes for the Navy. One is the AU-1 Corsair, specially designed for close air support. Although extensively modified, it basically follows the original F4U Corsair design first laid down in 1939—a dramatic instance of far-sighted designing.

The other Chance Vought plane in production for the Navy is the sleek looking F7U-3 Cutlass, a tailless, swept-wing fighter, powered by twin jet engines and afterburners. It was designed to out-fly and out-fight any other carrier-based aircraft in the world.

Solidly backed by 35 years of proved experience, Chance Vought engineers are continuing to pioneer. Design and development are working toward the most advanced piloted and pilotless aircraft of tomorrow.

Chance Vought Aircraft . DALLAS, TEXAS
 ONE OF THE FOUR DIVISIONS OF UNITED AIRCRAFT CORPORATION

Notes on Our Authors

Trial by Ice, page 44, is the co-operative work of three instructors in arctic warfare at the Marine Corps Educational Center, Quantico. LtCol Louis Metzger (top) was a tank and armored amphibian officer in the Pacific during World War II and saw combat in the Marshalls, Guam, and Okinawa. He was graduated from the Army Command and General Staff College in 1950 after a three-year tour of duty with Division of Plans & Policies, Headquarters Marine Corps. Col Metzger wears the Legion of Merit with Combat "V." LtCol Harold O. Oppenheimer (center) is familiar to GAZETTE readers as the author of *Saddle Up* in last month's issue and *Command of Native Troops* in October 1951.

He saw duty in Samoa, and Alaska, and holds two Letters of Commendation and the Bronze Star for bravery on Okinawa. A reserve officer, he was called back to duty in 1950 and now has returned to civilian life in Kansas City, Mo. Third author in the group is LtComdr O. W. Price (lower), a graduate of the University of Missouri who joined the Naval reserve in 1940. He was engineer officer on the destroyer *USS Hambleton*, first warship commissioned after Pearl Harbor, and saw service with the British fleet at Scapa Flow and Iceland, and with the North Africa invasion fleet.

1stLt Earl R. DeLong wrote "75s Up," page 54, from his experiences as executive officer and then skipper of the 7th Marines' Antitank Co in Korea.

He won his second Silver Star there, the first having been awarded for courage in the carrier *USS Hornet* when it was sunk in October 1942. In 1946 he was commissioned at Quantico and saw Canal Zone and Camp Lejeune duty before Korea. He is now at the Russian Language School.



Volunteer Recruiting Is the Answer, page 32, comes from the pen of LtCol A. D. Cereghino, who has been handling manpower problems at Headquarters Marine Corps the last three years. He has worked closely with the offices of the Secretary of the Navy, Assistant Secretary of Defense, and within the G-1 staff on matters affecting the entire scope of Marine personnel management. Commissioned in 1941, he saw World War II service in Europe and the Pacific. His personnel work began after the war as S-1 in Tientsin, China. Following this he was S-1, Service Command, personnel officer, and assistant G-1 with the Fleet Marine Force, Pacific.



An artilleryman of long and varied experience is LtCol William M. Miller, author of *Amphibious Artillery* on page 28. He was graduated from the Naval Academy in 1941 and served overseas with the 11th Marines on Guadalcanal and Cape Gloucester. He switched to the 13th Marines for the Iwo Jima assault and occupation duty in Japan. After attending the Junior Course at Quantico in 1948, Col Miller remained as an artillery instructor until joining the 10th Marines last year as Commanding Officer, 1st Battalion. Among his awards is the Bronze Star with combat "V."

In January, the GAZETTE ran a widely noticed article, *Qualities in Officers NCOs Expect*, by MSGT Charles V. Crumb. Now this veteran topkick comes back this month with another provocative piece, *Staff NCO School?* on page 17. Crumb, 48, taught school in Minnesota two years before entering the Corps in 1936 and has served 'round the globe in peace and war. His plea for a central NCO school comes from experience at the First Sergeants School in 1943, Officers Candidate and Reserve Officers School the following year, and the Navy Instructors School. In 1950, he joined the NROTC staff at Iowa State College. Crumb also wrote *From Meritorious NCO to Second Lieutenant* (September 1951). He wears the Purple Heart for action with the 2d Mar Div.





a staff non

THE IMPORTANCE OF well trained, efficient staff noncommissioned officers has long been understood by the officers of the Marine Corps as well as by the Staff NCOs themselves. It is an accepted fact that the standing of the Marine Corps today as one of the finest military groups in the world, and indeed the finest in its own field, could not have been attained without the sterling performance of the senior noncoms. The exploits of John Quick, Lou Diamond, Dan Daley, "Slug" Marvin, and many others have added to the reputation and the traditions of the Corps immeasurably. The future standing of the Marine Corps depends to a great extent upon the continued effi-

By MSgt Charles V. Crumb

ILLUSTRATED BY PFC CHRISTOPHER MAGALOS

cient performance of its Staff NCOs.

With the above facts so well understood by all, why has the instruction and indoctrination of this group been left to the haphazard and catch-as-you-can school of experience? Why is it taken for granted that a staff sergeant who made his last two grades at a Navy Yard intuitively will know how to handle a rifle platoon in com-

bat? Will a technical sergeant who received his last promotion while on recruiting duty know how to take over for the lieutenant of a machine gun platoon? It is understood that promotion examinations and military occupational specialty numbers take care of this problem to some

extent. But are these two safeguards enough?

The newly enlisted private goes through a grueling course of indoctrination before he is accepted in the ranks of the Corps. Promotion to the lower NCO ranks comes without formal schooling of any kind for general line jobs. Promotion to the senior noncom ranks still does not bring on any of that fine formal schooling that the Marine Corps can give. Junior officers, even those commissioned after several years in the ranks, get long weeks and months of well planned, well administered, and carefully supervised schooling with excellent results in their fine performance in the field. Officers of field rank go to their own staff and command schools and similar schools administered by other branches of the service. Yet the junior NCOs promoted to staff grades are left to their own devices in gaining the know-how necessary to fill their very important place in the functioning of the Marine Corps.

THE BENEFITS DERIVED from the establishment and maintenance of a Marine Corps Staff NCO school would be many.

No longer would the Marine Corps have to worry about the Staff NCOs who have been promoted to that rank while on long terms of detached and independent duty. The number of enlisted Marines doing jobs where no genuine up-to-date instruction is available is much greater than is generally known. Noncoms on embassy and consular guard duty, men with the reserve units, NROTC instructors, small detachments where proper instruction material and personnel are not available will probably number in the thousands. These men, after finishing a tour of this kind of duty, would attend the Staff NCO school and would come out as combat-ready senior noncoms, prepared to do good jobs, in the Marine Corps way, with a rifle or machine gun platoon, a mortar section, or as a company "Gunny," or as a member of one of the staff sections.

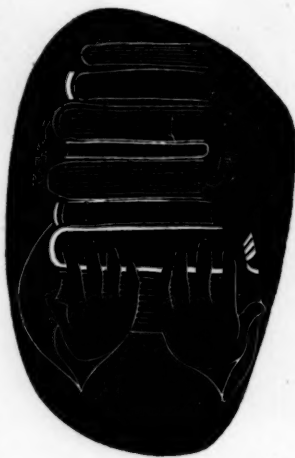
There will probably be very few of you who cannot recall a case during WW II of a Staff NCO who joined your outfit as a replacement and who seemed to be intelligent and willing enough but who just hadn't had the necessary instruction to efficiently perform the job his rank and MOS number called for. Some of these NCOs came to you from independent and detached-duty jobs which they had been given because of their fine records and their reliability. Assignment to a few months of

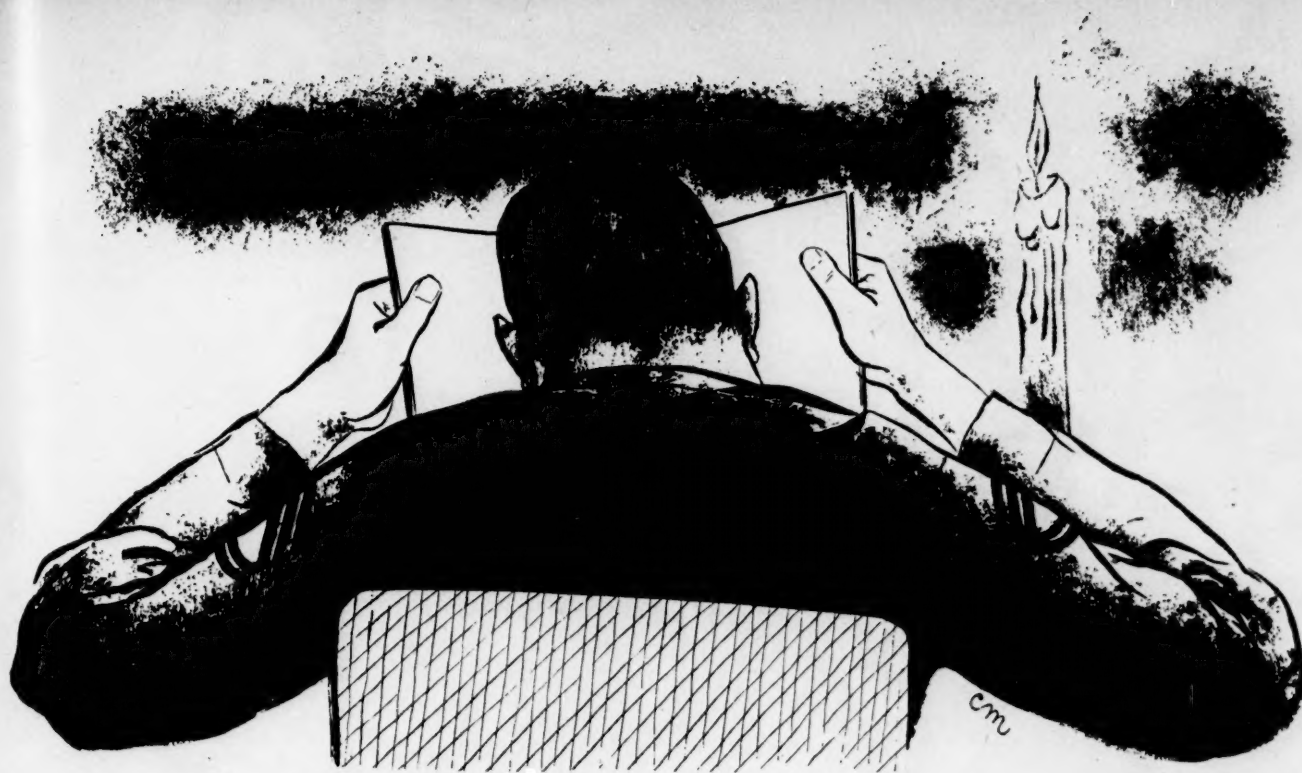
training with the kind of Staff NCO school that the Marine Corps could operate would have prepared these potentially capable NCOs for duty in the field.

THE ESTABLISHMENT OF SUCH A SCHOOL WOULD bring about the uniformity in methods of instruction, employment of weapons, and administrative procedures, and the all-around uniformity of effort that the Marine Corps realizes from its officer graduates of the Basic School. The graduates all come out with generally the same picture in their minds of what their job is, a picture that makes for a singleness of purpose and tends to get better and quicker results. The Staff NCOs today have various conceptions on just exactly what their jobs are and what their relations with their troops and their relations with their company officers should be. Their methods of instruction are those that they have developed themselves as a result of observation of others. These methods in many instances are not effective. Most of our Staff NCOs are very proficient in instruction on the nomenclature, care, maintenance, and the operation of weapons, but when it comes to employment of these weapons their thoughts are often a far cry from the methods that would be taught in a good Marine Corps school. There will always be a need for uniformity in administrative thinking among our senior noncoms, in and out of the Fleet Marine Force. This same uniformity would be a big break for those junior NCOs and the men in the ranks insofar as promotion, assignment, and general all-around supervision are concerned.

If all Staff NCOs were graduates of a well balanced school, the Marine Corps would have a ready backlog of officer material prepared for service as commissioned officers. It has never been easy, when the time comes for rapid expansion, for the Marine Corps to find suitable officer material from civilian sources. Officer procurement has been a major function of the recruiting branch. At the present time Marine Corps officer procurement personnel are again finding it difficult to dig out enough good Marine Corps officer material to fill the vacancies. With the bulk of the Staff NCOs well versed in troop leading, employment of weapons, proper instruction practices, staff functioning, and other phases of the military, the Marine Corps would have a ready supply of potential officers—men with a real pride in the branch of the service of their choice and with a professional outlook for duty.

In addition to the benefits listed above is the very apparent benefit of having a much better informed, better qualified Staff NCO for duty in the Fleet Marine Force and in the rest of the Marine Corps—a staff noncommissioned officer who will know exactly what the Marine Corps wants and expects of him and who will have the necessary equipment to go out and live up to these expectations.





As to the course of study for the proposed NCO school, wiser heads than mine could select and set up the curriculum. However, I have found the following subjects to be the most difficult to "pick up."

First, the essentials of the military staff and proper staff procedures. Only a few of our Staff NCOs ever get an opportunity to work as a member of a staff, and that is about the only way one has of acquiring first hand information on this subject. Too many good Marines with long years of service have found their duties more difficult, more complicated, and more confusing for the simple reason that they have had little or no schooling at all in staff procedure. This definitely should be included in the course of study.

● INFORMATION ON THE TECHNIQUES and doctrines of amphibious warfare, the Marine Corps specialty, is another subject that should be a "must." This complicated and exacting study has been of a confidential nature, and primarily for this reason most of our senior noncoms have had little experience with the big picture. Many, because of their participation in one or more amphibious landings, have a good working knowledge of one or more phases of the doctrine as it stands today, but few have had broad enough experience or training to have a conception of the whole. Because of the Staff NCO's important position in the outfit and because it is the Marine Corps specialty, he should be given a good insight into the entire set-up of amphibious warfare.

As has been mentioned earlier in this article, the Staff NCO is quite well versed in all but the tactical employment of the weapons. The proper use of the weapons organic to the Marine Corps infantry regiment should

comprise a considerable portion of the curriculum. The limitations and capabilities of the support weapons and how they are called for and controlled would have to be included.

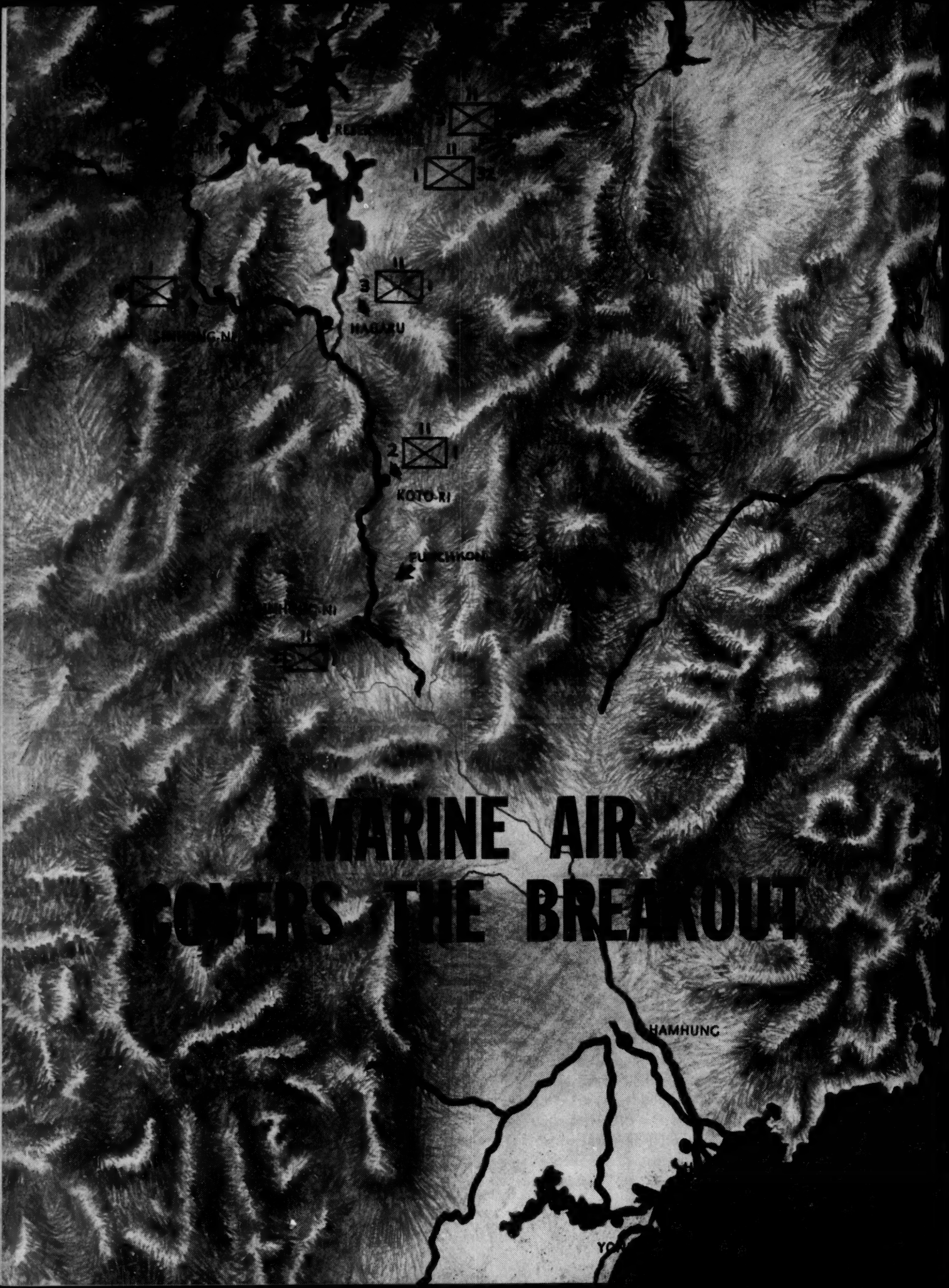
● TROOP LEADING SHOULD ALSO be the subject of many sessions of study and practical work. Some men are by nature better leaders than others, but none is so good that he does not require training and practice in the steps of troop leading.

Enough time should be spent on the problem of logistics so our NCO students will know something of the magnitude of the job. So little is understood by the average Marine of the complicated, tedious, never-ending problem of supply that he appreciates too little the efforts of the people connected with it.

Enough of the big picture administration should be included to give our noncoms an idea of how the Marine Corps handles the problems of pay, promotion, assignment, etc. So often we work on the tail end of the line in darkness and frustration, when a general picture of what we are working for might give us an incentive to do better.

In the pre-World War II Marine Corps, only enlisted men with long years in the ranks and usually longer years as corporals or sergeants were able to gain the much desired Staff NCO rank. This experience in a relatively uncomplicated Marine Corps made him an unusually capable man. Not so these days. Something must take the place of years in grade. I can think of no better substitute than three or four months of good instruction and practical work at a Staff NCO school established and operated by the Marine Corps.

USMC



The image is a black and white aerial photograph of a rugged, mountainous landscape. A river flows from the top left towards the bottom right. Several military positions are marked with rectangular boxes containing an 'X' and numbers. The positions are labeled as follows: 'REK' at the top; 'SUNG-NI' on the left; 'HAGRU' in the center; 'KOTO-KI' below Hagru; 'FUCHKON' below Koto-Ki; 'SUNG-NI' further down on the left; and 'HAMHUNG' at the bottom right. The text 'MARINE AIR COVERS THE BREAKOUT' is superimposed in large, bold, black letters across the center of the image. The bottom right corner shows a body of water and a small area labeled 'YON'.

MARINE AIR COVERS THE BREAKOUT

♣ ACCORDING TO THE CALENDAR THE TIME WAS LATE fall, but in the rugged mountains of North Korea the rage of arctic weather made a mockery of the seasons.

For three days the 1st MAW had been engaged in a desperate effort to furnish badly needed air support to the embattled men of the 1st Marine Division.* Grimly clinging to four perimeters, the Marines fought two equally vicious enemies—fanatical Chinese Communists and the cold.

In the freezing twilight of 30 November the news was flashed—the Marines are coming out. Withdrawal was dictated by harsh realities, for the “end the war” offensive launched by UN forces on 24 November had failed when hordes of Chinese Communists troops struck back against the Eighth Army in northwest Korea. The right flank of Eighth Army was overrun, necessitating a rapid withdrawal. Three days later, the Chinese struck X Corps on the east, directing their main attack against the 1st Mar Div. From 80,000 to 100,000 Reds flung themselves in repeated assaults against the Marine perimeters. At Yudam-ni the 5th and 7th Marines held the most advanced position, while single battalions of the 1st Marines defended the strategic towns of Hagaru, Koto-ri, and Chinhung-ni along the MSR. Meanwhile other X Corps units withdrew to more defensible positions.

At Yonpo and Wonsan, and aboard the escort carrier *Badoeng Strait*, the men of the 1st Marine Air Wing girded for a continuation of the all-out effort, for without maximum close air support it was doubtful that the 1st Division could reach the sea. Fifth Air Force assigned the 1st MAW the exclusive mission of supporting the Marines and soldiers of X Corps in the fighting withdrawal to the sea. Serving to brighten the picture further was the promise that the Navy planes of Carrier Task Force 77 would be available for close support, while Fifth Air Force tactical planes would furnish deep support and the Air Force Combat Cargo Command would provide a substantial part of the logistics requirements.

Never in the memory of the oldest Marine had so much depended on a supporting arm, yet never had circumstances conspired so well to prevent Marine air from carrying out its mission. The low sullen overcast which often hid the peaks rising from the Chosin area plateau was an enemy to be feared more than the Chinese Reds. Altimeters gave no warning of the dark gray mass which lurked in the swirling mist and frequently materialized into the ominous bulk of a mountain side or crest. Above a certain altitude pilots knew they were safe, but to carry out their close support attacks they often had to fly through or under the overcast. Strikes frequently had

In cooperation with the Historical Branch, G-3, Headquarters, U. S. Marine Corps, the GAZETTE herewith presents another in a series of official accounts dealing with Marine operations in Korea. Prepared by writers and researchers of the Historical Branch, these articles are based on available records and reports from units in Korea. Also to be treated in this series:

1st Engineers in Korea
1st Tanks in Korea
Marine Artillery in Korea

Publication is scheduled for consecutive monthly issues.

Admittedly it is too soon to write a definitive history of Marine fighting in Korea. Not only are enemy sources lacking, but even Marine and Army records are still incomplete. Articles of the length to be used in the GAZETTE, moreover, do not allow space for more than an outline of operations which will ultimately be given the detailed treatment of a monograph.

But timeliness is also an end to be sought, and these preliminary narratives are based on Marine and Army reports received up to this time. These articles are presented in the hope that GAZETTE readers will feel free to add to the incomplete record. This is an invitation, therefore, for you to supplement the existing record. Send your comments and criticisms, as well as any other information you can make available, to the Historical Branch, G-3, Headquarters, U. S. Marine Corps, Washington 25, D. C.

to be channeled along valleys or ravines, and firing runs had to be initiated from low altitudes with a resulting loss in speed and increased vulnerability.

Added to the burdens of mountainous terrain and overcast skies, the 1st MAW had to overcome staggering maintenance and servicing problems. These difficulties resulted from the decision to abandon Wonsan and concentrate X Corps rear echelon units in the Hamhung-Yonpo-Hungam area. VMFs-214 and 312 and VMF (N)-542 joined VMF-212 and VMF(N)-513 at the Yonpo field.

The concentration of five squadrons at Yonpo led to operating difficulties unequalled in the history of Marine aviation. Though problems of equipment, maintenance, and supply were anticipated; time, weather, and the tactical situation forced the squadrons to operate under the most adverse conditions. The lack of heated space at Yonpo compelled mechanics to perform delicate engine work without gloves. This often resulted in mild cases of frostbite. Great difficulty was experienced in starting engines, and when oil dilution failed, the Marines resorted to warming up engines every two hours through the night. The lack of transportation, bomb handling equipment, and spare parts often threatened the cancellation of scheduled flights. But somehow the obstacles were overcome even if, on occasion, flights were delayed. All available trucks were operated 24 hours a day, running mostly to the ammunition dump for ordnance and to Hungnam for supplies.

Even the normally swift and easy task of rearming and

*See K. W. Condit and E. H. Giusti, *Marine Air at the Chosin Reservoir*, Marine Corps Gazette, July 1952.

By E. H. Giusti and K. W. Condit

refueling planes became a struggle. The few available refuelers had to be filled directly from 400-pound, 55-gallon drums. Bombs were often unloaded close to the flight line by simply driving the trucks out from under the loads. After manhandling the bombs onto the bomb trailers, the men pulled the trailers to the planes and by pure physical exertion lifted the ordnance up to the racks.

OF PARTICULAR CONCERN to engineering sections was the shortage of spare parts. And it was no wonder that engineering crews prayed that if a plane had to crash, it crashed close to the field where crews could cannibalize the remains. On one occasion when a Corsair was shot down 30 miles north of Yonpo, an officer, two ordnancemen, and two mechanics took a jeep to the scene through guerrilla territory to scavenge for vitally needed parts.

Before the 5th and 7th Marines could commence movement along the Yudam-ni-Hagaru road as a coordinated body, units had to be redeployed from the valley extending east from Yudam-ni to the valley running south toward Hagaru. In joint conference, Col Homer L. Litzenberg, CO 7th Marines and LtCol Raymond L. Murray, CO 5th Marines, decided to redeploy by day rather than by night. Certain obvious advantages would have occurred from a movement in the dark but the Marine commanders were willing to forego these, for daylight promised a sky full of Corsairs and better observation.

Plans for 1 December called for all squadrons to furnish close air support flights at dawn. Following the first strikes of the day, planes of the Wonsan squadrons were to land at Yonpo and continue operations from the advanced air base. At Wonsan the snow was light and the first strike, four Corsairs of VMF-214, was winging toward the reservoir by 0645. Aboard the *Badoeng Strait*, VMF-323 was able to get its first flight airborne by 0845. But at Yonpo six inches of snow coated the runway. Lacking snow-removal equipment, Marines substituted make-shift plows and muscle to clear a narrow space on the strip. At daybreak the weather began to lift. By 1000 they had gained enough space to permit the 0645 VMF-214 flight to come aboard, but it was 1215 before VMF-212 could get the first Yonpo strike into the air. In spite of the weather 1st MAW planes flew 118 sorties during the day, almost all in support of the 1st MarDiv and U. S. Army units east of the reservoir.

As the Marines at Yudam-ni began their redeployment on the morning of 1 December, first priority for close support planes went to the 5th Marines holding the perimeter positions north and west of the town. It is a maxim of warfare that an aggressive enemy makes it easy to engage, but difficult to disengage. And that morning the Chinese Reds were proving the truth of the maxim. Both 1/5 and 3/5 were forced to break off fights in order to stick to the redeployment schedule. And air played an

important part in the successful execution of their movements. Four Corsairs of VMF-214 were prowling overhead when at 0810 3/5 began to withdraw its companies. First H Co came, then I Co pulled back. Finally came the turn of G Co, but as the unit withdrew the enemy threatened to attack. At once the forward air controller summoned the Corsairs, and in a few moments they were snarling down to hit the Chinese with rockets, 500-pound bombs, and 20mm shells. As the planes pressed their attacks with repeated runs, artillery and mortar fire joined with air to screen the company. Any aggressive intention the enemy may have harbored was quickly dissipated, and G Co moved to new positions with no further trouble.

Meanwhile another flight of four VMF-214 planes arrived on the scene and relieved the Corsairs on station just as the two engaged companies of 1/5 prepared to execute their withdrawal. Contact between the air and ground was quickly established, and the FAC briefed the flight leader on tactical dispositions, target location, and time and direction of attack. As a result, the planes struck the enemy frontline positions just as C Co moved back. Accurate bomb drops and rocket fire kept the enemy off balance until C Co reached its assigned position.

The withdrawal of B Co, however, is another story, and one which graphically illustrates the importance of close support. B Co experienced no difficulty in pulling back to the base of Hill 1240, but at this crucial point a breakdown in communications deprived it of air support. Without positive control, planes could not be used to strike in close proximity to friendly lines. To make matters worse, artillery too could not be reached, and the Reds had occupied the company's former position on Hill 1240. The company commander had no recourse but to employ leapfrogging machine gun sections for covering fire as the riflemen spurted across the open ground. During this maneuver the Marines were subjected to a withering fire from their previous position on Hill 1240, and casualties were taken. However, vengeance was exacted. When communication was again established, four Corsairs of VMF-312 were unleashed on the Chinese positions, and they hit the area with four 500-pound bombs, 27 rockets, and 3,000 20mm shells.

During the day Marine close support strikes were not limited to helping units withdraw, for 3/7, the depleted 1/7, and 3/5 attacked south from Yudam-ni to seize high ground along the road to Hagaru. Repeatedly, air was called in to hit strong points slowing up the advance, and by nightfall the Marines had taken a long step toward "Objective Hagaru."

While the 1st Mar Div received 36 close support sorties during the daylight hours of 1 December, the greatest effort was made in behalf of three Army battalions, 3/31, 1/32, and 57th Field Artillery. A total of 46 sorties were flown in support of these units. For three days these men had fought a grim battle for survival against heavy odds.



Moving along the road by day and defending perimeters by night they had advanced within eight to ten miles of Hagaru when disaster struck.

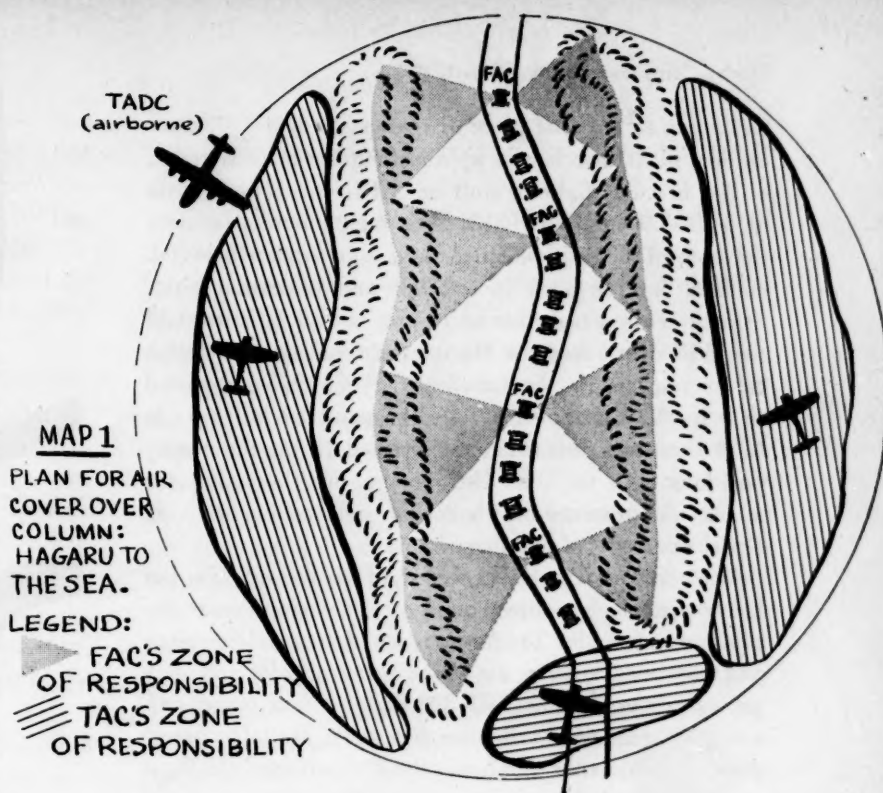
Dawn on the morning of 1 December found the Army units preparing to move out towards Hagaru. Vehicles and guns which could not be taken along were destroyed and wounded were loaded aboard trucks. The convoy was formed and Capt Edward P. Stamford, USMC, who was attached to 1/32 as forward air controller, took his post 20 yards behind the point. Corsairs of VMF(N)-513 and Hedron-12 were on station when the column moved out shortly after 1000. It was fortunate that they were, for just as the convoy started Chinese Reds launched a fierce attack against the head of the column with small arms fire and closed to within grenade range. For a few moments the fighting was touch and go, but Capt Stamford, himself under fire, closely directed the planes in repeated napalm, bomb, rocket, and strafing runs. A rocket from one of the planes was actually fired into a gully only 20 yards from friendly troops, and struck among the grenade-throwing Chinese.

The assorted ordnance dropped by the Corsairs soon proved too strong a dish for enemy stomachs. The Reds broke off their attack and fled for better cover. Marine pilots estimated that approximately 2,000 enemy troops launched the initial assault, and it is doubtful that even half of these escaped unscathed.

By late afternoon every squadron of the 1st MAW had flights hitting the Chinese hordes. All day the pattern was repeated with Marine air striking enemy formations on both flanks, to the rear and in front of the column. Owing to close air support, the progress of the convoy, though slow, was steady, for during daylight the enemy never succeeded in mounting a decisive assault.

At dusk, unfortunately, the column was stopped by a heavily defended roadblock. Dark came on fast, and air support dwindled, then became non-existent. In the black hours of the night the enemy finally overwhelmed the Army battalions. For the next two days flights of Marine planes occasionally located and supported isolated groups of Army troops attempting to reach Hagaru. Many did, but the three battalions as such had ceased to exist.* Though darkness chained the majority of Marine planes to the ground, the tired and cold men fighting at the reservoir knew they still could depend on limited, but effective, air support from specially equipped night fighters.

At Yonpo the first night heckler flight was off the deck at 2000. Through the night Tigercats of VMF(N)-542 and Corsairs of VMF(N)-513 were constantly on station over the scattered fighting fronts. The Marines had learned that Chinese artillery and automatic weapons fire



dropped off sharply when the hecklers were overhead. Gun flashes revealed the enemy's guns, and Marine night fighters had proved that they could knock them out. In addition, Marine FACs had the means of directing these planes in strikes close to friendly lines.

The night of 1-2 December was typical. Outside Hagaru Tigercats struck a Red troop concentration, knocked out a howitzer, and halted an enemy jump-off in the southern sector of the perimeter. At Yudam-ni both the 5th and 7th Marines utilized Tigercats to subdue enemy fire. Corsairs struck troop concentrations at Yudam-ni, Hagaru, and Koto-ri. With one exception, the strikes of both night flying squadrons were positively controlled by FACs.

Dawn on the morning of 2 December was clear with unlimited visibility. By 0705 flights from both *Badoeng Strait* and Yonpo were pointing toward the Yudam-ni area, for 2 December was to be the crucial day of the march to Hagaru. Just south of Yudam-ni the convoy of the 5th and 7th Marines, loaded with equipment and wounded, was preparing to move out. Before it lay 14 to 16 miles of tortuous and icy roads through mountainous terrain swarming with Chinese Reds. The key terrain feature along the route was 4,000-foot Sinhung-ni Pass midway between Yudam-ni and Hagaru. Wisely, Col Litzenberg had placed F Co 2/7 at the pass even before the Chinese counterstroke of 27 November. For five days this company with the aid of close support had beaten off every enemy attempt to seize this strategic point. By 2 December it had suffered 140 casualties, but

*Capt Stamford was captured during the night, but escaped and made his way to Hagaru the next morning.

still clung to the vital piece of real estate, and 1/7, after an epic night march, was approaching the pass as relief.

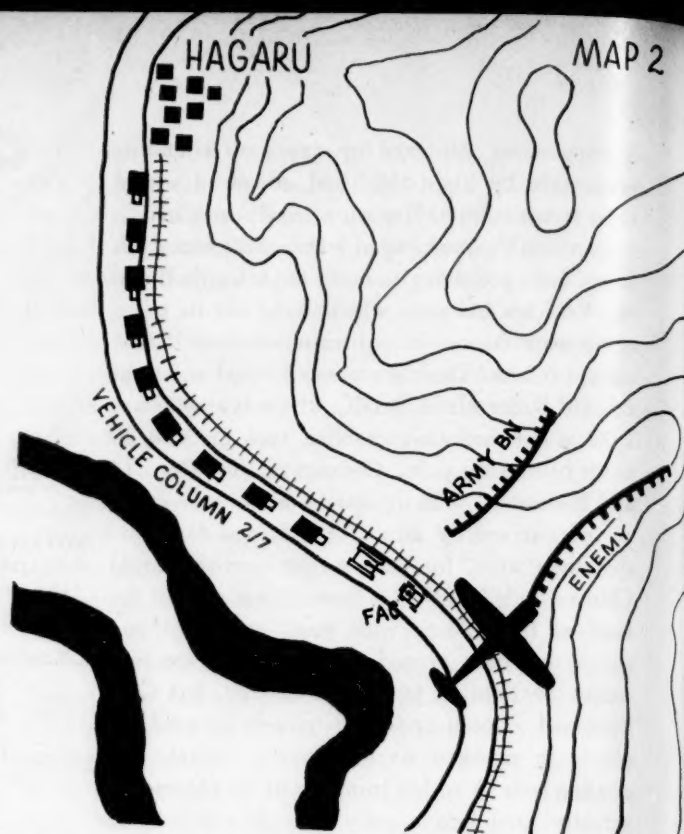
The first day-fighters aloft on 2 December were those of VMF-323 and VMF-212. Both flights were passed to the control of 2/5 which, acting as rearguard for the column, was engaged in a bitter and important fight. Strongly entrenched Chinese troops on Hill 1276 west of the MSR overlooked the Marine train and posed a threat to its movement. An attack by F Co 2/5 supported only by 4.2 mortars had failed to gain the hill top. At 0730 however, Corsairs were directed to hit the enemy positions with napalm. The napalm fell short, but the attack was continued with rocket and strafing runs as F Co renewed its assault.

The company reached the crest of the hill quickly, but heavy machine gun fire from the reverse slope made the position untenable. The Marines withdrew a safe distance and requested another air strike using napalm and 500-pound bombs. A new VMF-323 flight of four planes carrying the requested ordnance was made available immediately. In a matter of minutes the FAC oriented the flight and pinpointed the enemy position. This time the heavy ordnance was right on target. Blasted and burned by the bombs and napalm, the terrified enemy deserted his positions, as the Corsairs continued their attack with rocket and 20mm strafing runs.

While this fight was in progress, the column had moved out. By the time the Marine planes finished their runs, the train had advanced to a point where possession of Hill 1276 no longer had tactical value. Therefore, 2/5 withdrew to its next selected rear guard position. Meanwhile the anxiously awaited news had arrived—1/7 had reached the vital pass.

Moving slowly, the roadbound column was in constant danger of heavy attack. But if vehicles and heavy supporting weapons were committed to the road, Marine infantry was not. Progress was achieved by rifle units

Mortarmen had a new rule-of-thumb—clear the tails of the planes



seizing the high ground on both sides of the road, while other units attacked astride the road and defended the rear. Thus, the vehicle train actually advanced as the center of a moving perimeter.

During daylight, air support was constantly available 360 degrees around the perimeter. It was frequently needed, and when requested, always provided. On the march FACs moved with infantry units to the front and rear, on the flanks, and in the column itself. Attack on any target within 2,000 yards of the road was under the positive control of the FACs. Beyond 2,000 yards enemy troops and positions were attacked as targets of opportunity. In this way enemy not already in position along the MSR had first to contend with the devastating attacks of the fighter planes. The Chinese Reds who survived these

strikes and penetrated to positions close to the column invariably came under attack by Marine air and ground elements protecting the train. Never was the enemy able to mount an attack in force against the column.

So well did this system work that the enemy found himself more often the defender than the aggressor. This was the case when a heavily defended roadblock stopped the column in the late afternoon. Twenty-two planes, including Navy aircraft, were used to help break

through the enemy resistance. Following artillery and 81mm preparation fires, Marine and Navy planes pounded the enemy position with bombs and blanketed it with the searing fire of napalm tanks. Close on the heels of the last strike the Marines jumped off in assault, and those Chinese who survived the aerial attack were disposed of by bayonet-wielding infantrymen while still huddled in their foxholes.

Throughout the day the men of the 5th and 7th Marines had been treated to an amazing spectacle of concentrated and varied air activities. With as many as 40 to 60 tactical planes circling, diving, and climbing in the limited air space, heavily laden C-119s dropped supplies, observation aircraft scurried back and forth through the welter of cargo chutes, and helicopters fluttered down to evacuate the seriously wounded.

With the coming of darkness however the sky was soon empty of planes and the Marines were left largely to their own resources.

Night was the favorite Chinese time of attack, for during the dark hours they were free to mass their troops and move close to friendly lines without paying an exorbitant price to Marine air. The night hours passed anxiously as the column and its protective screen of infantry units slowly advanced toward the pass. But it soon became clear that the enemy had been so badly mangled in the day-long fighting of 2 December, that he was unable to mount an assault strong enough to threaten the column.

On the morning of 3 December the column's delayed take-off was completed. The column moved on but by 1000 the column was again under attack. Marine planes sky-bombed the enemy position. For the day the pattern of the fighting changed. The column fought their way through the enemy's deadly combat. The enemy's attack was early after the column's delayed take-off.

By 1900 the column had reached Hagaru. The column reached Hagaru at noon before the enemy's attack. The Chinese position was up to the very rim of the column's perimeter. The Chinese called only three-fourths of the column's perimeter. It was fitting that the column's perimeter was the junction of the column's strike.

During the day the 1st MAF flew 91 close support sorties, 50 in support of the 1st Mar Div and the remainder in support of other X Corps units.

The arrival of the 5th and 7th Marines made the Hagaru defenses so strong that the Chinese dared not risk attack. They preferred to wait until the Marines were most vulnerable, on the march with their vehicles, equipment and wounded. Through 4 and 5 December the Ma-

rines took advantage of the lull in fighting to catch their breaths and prepare for the next leg of the journey to the sea.

But there was no respite for Marine fliers. On 4 and 5 December they flew a total of 297 sorties against enemy positions, vehicles, and troop concentrations throughout the reservoir area.

The next day saw Marine air return to its primary role of close support for ground troops, for on 6 December the 1st Mar Div broke out of Hagaru. Its immediate objective was Koto-ri, where 2/1 and attached Army troops were holding out. The 7th Marines, reinforced by a composite Army battalion, moved out first. Following the tactics used so successfully on the withdrawal from Yudam-ni, the high ground on each side of the road was to be secured by two battalions advancing on the flanks. A third battalion was to be at the head of the column and another was to serve as rear guard. The 5th Marines was to hold the Hagaru perimeter until all other units, supplies, and equipment had been moved. Then the regiment would withdraw, escorting its vehicle train and deployed like the 7th Marines.

Air planning was primarily concerned with providing the maximum support for the moving column. The experience gained on the withdrawal from Yudam-ni was a valuable asset to the Marine commanders. The column and its vehicle train were to be protected by the 7th Marines.

The column's control and communication with the units. In mountain terrain, where the range of radios was very limited in range, this was a constant consideration. Until the 1st Mar Div reached the coast, the airborne TADC controlled all aircraft supporting the division.

While Marine staff officers were perfecting these plans, the air strength with which to carry them out was depleted by the departure of VMF-212 for Japan on 5 December. Assigned to the carrier *Bataan*, the squadron did not go aboard ship and return to the scene of operations until after the Marines had reached the sea.

However, the four remaining squadrons were determined to increase their efforts. By 0715 on the morning of the 6th the first Marine planes, 18 Corsairs of VMF-214, had reported on station over Hagaru. They were

assigned a mission in support of 2/7, and what followed was typical of Marine close support operations (Map 2). After advancing about 2,000 yards, the column had been stopped by enemy fire from a ravine about 100 yards east of the road. The Army battalion, acting as flank guard on that side, was deployed within 75 to 100 yards of the enemy and was also pinned down.

The 2/7 forward air controller, riding in a jeep immediately behind the lead tank of the column, contacted TAC, briefed him on the situation, and directed him in a dummy run. When he was certain that the TAC had located the target, the FAC ordered a live run with 20mm cannon fire and a napalm tank to mark the spot.

Meanwhile, the other aircraft were monitoring the radio net so that they also were familiar with the target. With the arrival of eight Navy planes from the carrier *Leyte*, 26 planes were now overhead. They were divided into three flights and orbited at 8,000, 9,000, and 10,000 feet respectively.

THE FIRST FLIGHT OF EIGHT PLANES was called in and attacked with rockets and proximity-fused 500-pound bombs. They worked over the target but did not silence it, so the second flight was called in. With this flight a different technique was used. In order to conserve ammunition and keep the aircraft on station as long as possible, only every other plane fired. The others made dummy runs. But since the enemy fire was not stopped by this procedure, the pilots were all ordered to fire.

An hour had passed since the column first halted. Koto-ri was still eight miles away. Precious daylight hours were dwindling, so Col Litzenberg came forward to confer with the FAC. The 7th Marines' commander decided to move the column out under the fire of aircraft as they made their runs across the road and parallel to the Army battalion frontline. This put the target within 100 yards of friendly troops in both range and deflection.

The pilots of the next flight, the planes from the *Leyte*, were informed individually of Col Litzenberg's decision and ordered to attack. Followed by four Corsairs of VMF-323, they swooped down. All planes strafed the target with 20mm shells, the projectiles passing about 75 feet over the column. So accurate was the fire that not one Marine or soldier was hit.

While the planes made their runs, the ground troops let go with everything they had. The 81mm mortar shell trajectories were higher than the altitude of the attacking planes, but rather than lose firepower, the gunners were told to aim at the tails of the planes. Using this rule-of-thumb method, the mortarmen lobbed shells between the attacking aircraft. As the column moved down the road, new flights took up the attack, so control of the strikes was passed back along the column from one FAC to another. All day long planes continued to hit this target, keeping it neutralized until the column had passed.

As the Marine column moved towards Koto-ri, other departures from normal procedures cropped up. For example, in situations where the FAC was not in a position to control a strike, he sometimes worked through the infantry unit commander. In one instance, when a platoon of F Co, 7th Marines was held up on the left of the road by about 200 Chinese, the platoon commander requested an air strike. Since the FAC was unable to see the target, he had the platoon commander pass the information to him on the regular battalion tactical net. He, in turn, relayed it to the flight leader on his high-frequency set. Thus, by the resourcefulness of the FAC, a close support strike was carried out successfully on a target he could not see.

WHILE FACs ON THE GROUND controlled most of the planes flying close support missions, their efforts were supplemented by the TACs. Ranging ahead and to both sides of the column, these pilots directed attacks on enemy out of sight of the controllers on the ground. The TACs were particularly effective in directing strikes against enemy troops massing out of range or sight of the ground troops for assaults on the column. In their bunkers and other dug-in positions, the Chinese had some degree of protection. But troops massing on the barren snow-covered hills were particularly vulnerable. Repeatedly Marine pilots broke up these troop concentrations, compelling the enemy to confine his efforts to the delivery of fire from prepared positions.

Meanwhile, Marine pilots were busy in other parts of the battlefield. Back at Hagaru they supported an attack by the 5th Marines designed to capture high ground east of the town. They also flew missions in support of the other X Corps units, the 3d and 7th U. S. Infantry Divisions and the I ROK Corps. By evening of 7 December, the rear guard of the division was within the 2/1 perimeter at Koto-ri. During the two-day withdrawal from Hagaru to Koto-ri Marine planes had flown a total of 240 sorties in support of X Corps. Of these, 201 were in close support of ground troops. The 1st Mar Div received 138; the 3d Inf Div, 11; the 7th Inf Div, 39; and the I ROK Corps, 12. In addition, the X Corps was supported by 245 sorties flown by Navy carrier planes and 83 sorties by the Air Force. The latter were mostly supply drops, but the Navy devoted most of its efforts to close support.

COMBAT MISSIONS WERE NOT the only ones flown by Marine pilots. They also participated in resupply and casualty evacuation flights. Although these jobs were primarily carried out by the Far East Air Force Combat Cargo Command, Marines of VMO-6, VMR-152, and Hedron 1st MAW bore a hand. Air drops were made primarily by C-119s of Combat Cargo Command, reinforced by 5 R5Ds of VMR-152 attached to the Air Force for this purpose. A few air drops were made by the Marine



1st Air Delivery Platoon, using a handful of C-47s and C-119s borrowed from the Air Force and four or five Marine R4Ds.

Casualties were evacuated from Yudam-ni, Hagaru, and Koto-ri under the most hazardous conditions. At Yudam-ni only light observation planes (OYs) and helicopters could land. C-47 strips were constructed at Hagaru and Koto-ri, but both strips were extremely short. At Koto-ri the 2/1 FAC, who was a qualified landing signal officer, guided planes in as though they were landing on a carrier deck. From these strips a total of 4,675 Marine and Army wounded were flown out safely. Air Force C-119s and C-47s, reinforced by a few attached Marine R4Ds, flew out most of these. VMO-6 also helped evacuate casualties. Their OYs and helicopters, reinforced by three TBM aircraft on 7 December, flew out 163 during the first 10 days of December.

With its arrival at Koto-ri, the 1st Mar Div had completed all but the last leg of its fighting withdrawal. All that remained was to descend the precipitous gorge of Funchilon Pass to the safety of Chinhung-ni on the plain below. At this village, where Army troops of the 3d Inf Div had arrived in strength, the Marines would board trucks for the journey to Hungnam and evacuation by sea.

✻ MARINE COMMANDERS PLANNED to use the same scheme of maneuver they had used so successfully before. But this time the main body of the division would be assisted by 1/1. From its position at Chinhung-ni, this battalion was to attack up the gorge and seize dominating Hill 1081. The one complication was a blown bridge in the gorge at a spot where it was impossible to bypass. Combat Cargo Command fliers came to the rescue by air-dropping six sections of a Treadway bridge which Marine engineers planned to put in place the next day.

On 8 December, the morning scheduled for the resumption of the attack, foul weather deprived the Marines of all air support. A raging blizzard grounded all planes, delayed the repair at the blown bridge, and bogged down the ground attack so badly that only slight gains were made. But the morning of the 9th was bright and clear. From carriers steaming off shore and from Yonpo, Corsairs took off for a full day of strikes.

By 0715 a two-plane flight from VMF-312 was over the target, attacking positions on both sides of the road. Flights from all the other Marine squadrons followed and kept up a continuous attack. Other Marine planes supported the assault of 1/1 on Hill 1081 and covered Marine engineers putting in the Treadway bridge. As on previous days, aircraft were controlled by the airborne tactical air direction center, which circled the target area and assigned aircraft to various FACs and TACs.

The air effort was continued on the 10th and morning of the 11th, as the Marine division continued to move down through the pass towards Chinhung-ni. Some very

effective strikes were directed by the FAC of 1/1 from the top of Hill 1081. He was in an excellent position to observe the action in the gorge below and called strikes on enemy machine gun positions along a railroad embankment and on a hill overlooking the road. One particularly effective strike was made by four Corsairs of VMF-312. After bombing a group of houses along the railroad with 500-pound general purpose and 265-pound fragmentation bombs, the pilots dived down to make strafing runs. About 200 enemy troops were killed as they ran out of the shattered buildings.

Once the Marines had successfully passed over the Treadway bridge, they had little difficulty in closing Chinhung-ni that night. The next morning they began moving to Hungnam by truck, and by 1300 on 11 December the last units had cleared the town.

With the departure of the 1st Marine Division for Hungnam and evacuation by sea, the main task of the 1st MAW was finished. In anticipation of the event, VMR-152 and Combat Cargo Command had begun evacuating supplies and personnel from Yonpo on the 10th. On 14 December the three land-based fighter squadrons, VMF-312 and VMF(N)s-513 and 542, departed for Japan. Control of all aircraft in the X Corps zone passed to Commander Task Force 90 afloat, on the same day. And by 18 December the evacuation of all equipment and personnel of the 1st MAW had been completed.

The fighting withdrawal was over, and Americans everywhere felt a distinct relief. But as the details of the epic fight unfolded, relief became tinged with awe. A Marine division and a Marine air wing, fighting against seemingly insuperable odds, had severely mangled an enemy vastly superior in strength. Trapped at the Chosin Reservoir miles from the sea, the ground Marines had turned into aggressors and battled their way out despite anything that the enemy, the terrain, or the weather could do to prevent it. Yet they were the first to demand that a large share of credit for the successful withdrawal go to their flying counterparts in the 1st MAW. For in the hour of greatest need, Marine airmen had not faltered. The utmost had been demanded of the 1st Wing and the utmost had been given. MajGen O. P. Smith, Commanding General of the 1st Marine Division, expressed the sentiments of all when he said:

"During the long reaches of the night and in the snow storms many a Marine prayed for the coming of day or clearing weather when he knew he would again hear the welcome roar of your planes as they dealt out destruction to the enemy . . . Never in its history has Marine Aviation given more convincing proof of its indispensable value to the ground Marine. A bond of understanding has been established that will never be broken." USMC

Next Month: 1st Engineers in Korea



AMPHIBIOUS ARTILLERY

By LtCol William M. Miller

◆ LEAVING ASIDE THE PROS AND CONS OF THE DESIRABILITY of the LVT(A), let's face facts—we've got the LVT(A). Just what is this alphabetical monster that we have? The present LVT(A) is nothing more than an expensive, amphibious gun platform for a 75mm pack howitzer, or, in other words, an amphibious artillery piece. You certainly wouldn't glean that fact from the discussions concerning the weapon that you hear every day, nor from the historical examples of its employment in the past. The fact that it is an artillery weapon has begun to creep into the missions assigned the LVT(A), but it has been a slow and evolutionary process. And that is quite a concession over former ideas concerning this weapon. Let's face some more facts, then, and realize that the LVT(A) battalion with its large number of amphibious artillery pieces has a tremendous potential of firepower with which to support those infantry commanders charged with making the beach assault.

Why then all of the backing and filling about the missions of the LVT(A)? We have a weapon that is an artillery weapon. It does have capabilities which can be adapted to other types of operations, but it is primarily adaptable for the delivery of indirect fire support to the infantry. Ah! The dissenter over there in the corner starts mumbling about the assault gun mission. A low mumble should be about all we hear since it was long ago realized that the low muzzle velocity of the 75mm pack howitzer—and even of the 105mm howitzer—precluded the efficient use of either as an assault weapon. Witness the development of the weapons with which our tanks are armed—high velocity weapons are used almost exclusively now. The LVT(A) is not a tank and should not be used as such. It does not have the armor to give it the required protection from enemy action.

Would you want to sacrifice a good artillery piece by employing it against an enemy installation which it is not designed to attack? Rarely will the commander be in any position in which he can afford to fritter away such valuable firepower. Supremacy in firepower is one of the goals that must be sought in combat in order to assure the commander a reasonable chance of attaining his objective. This is particularly true in an amphibious operation where the attacking troops are

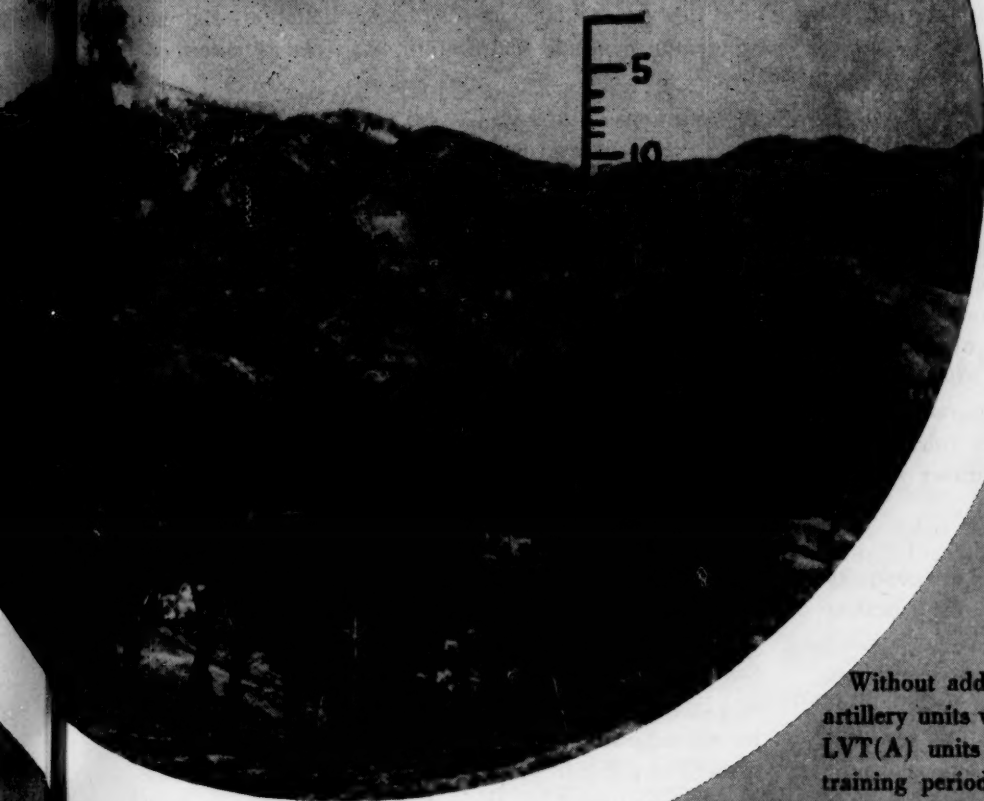
faced with a well-disposed enemy with a strong will to fight. In making an estimate of field artillery requirements for a particular operation, many factors must be considered but the ultimate aim is to arrive at the proper amount of firepower required from field artillery to support the attack. This amount of firepower often is not realized due to many factors. These factors are not important in the scope of this article, but must be accepted as realities which will tend to reduce our desirable firepower requirements.

The LVT(A) battalion organization is designed for amphibious operations (though not for primary employment as artillery). It possesses an excellent source of firepower which will go far to offset any administrative losses which will occur before the operation is even underway. Certainly we don't want to lose this firepower by inefficient operation after we have brought it to the objective area.

Therefore, for proper employment LVT(A) units should, upon completion of their firing, run into the beach and occupy positions to provide support in the field artillery role rather than being wasted as assault guns. If missions are required where they *must* fire direct fire (and they should be few), then LVT(A)s may be relieved, in whatever force required, from their field artillery role. Meanwhile, all LVT(A)s are in position and ready to fire at all times, and not, as so often happens, waiting for targets. LVT(A)s have been used in an artillery role in combat during WW II with great success.

Field artillery systems of observation and liaison may be utilized to provide targets and observation. Prior to commencing the operation, field artillery units can pro-

ARTILLERY



vide personnel to aid in the training of LVT(A) units to act as field artillery.

Specifically, how may we utilize the present organization to get the support we want? First, let us look at the LVT(A) organization. The battalion is divided into companies which are further subdivided into platoons. Each company has the approximate firepower of a light artillery battalion—the platoons approximate a battery. For transportation, in addition to that provided by the LVT(A)s themselves, the battalion has LVTs, jeeps, and 1½-ton and 2½-ton trucks, though not in great quantity. How about communications equipment? There is no wire equipment allowed by the T/A; reliance for communications is placed entirely on radio. A variety of radio sets are provided the LVT(A) units. However, the radios now in the LVT(A) will not satisfactorily net with the radios which are carried by the field artillery forward observers. The battalion has no observer per-

sonnel nor liaison personnel.

Obviously, the present organization is not equipped to perform missions as field artillery. Certainly we must give it the minimum equipment required for operations as a field artillery unit. In addition to the aiming circles and graphical firing tables now authorized, the companies need: sound powered systems of telephones for the platoons; radios which will net with the radios of the artillery forward observers; a complete set of fire direction equipment for use in the fire direction center of each company; a wire allowance; wire reels and axles; and at least two telephones to tie into the artillery when artillery elements can lay lines to it. Since we are speaking about the present organization, let us see if we can adapt it to the mission of field artillery.

Without adding personnel to the LVT(A) units, field artillery units will be required to assist in the training of LVT(A) units to perform a field artillery role. During training periods, one officer and one enlisted man are needed to work with each platoon and one officer and a minimum of two enlisted fire direction personnel to work with the company headquarters. The company headquarters must assign enlisted personnel to work with the officer assigned as operations officer in the fire direction center.

Let us assume the training period has been completed and the operation has begun. We will follow it through to see how and when LVT(A) units tie into the field artillery organization, and just how they function. Let us assume we have an LVT(A) battalion supporting a Marine division in an amphibious operation. Two regiments are landing in assault with two battalions abreast. One LVT(A) company is supporting each assault infantry battalion. The LVT(A)s fire on targets as they approach the beach. Upon touching down they proceed to execute missions as assigned until approximately the time the infantry companies have reached their initial objectives. In the meantime, the infantry battalion headquarters should have arrived on the beach. Upon order of the company commander, the LVT(A) company should take up positions to fire as field artillery. The

position occupied should have been previously designated from map and aerial photo reconnaissance if possible. One way of expediting this assumption of an indirect fire role is as follows: As soon as the selected position area is available, one LVT(A) platoon occupies positions in the area. The LVT(A) fire direction center also occupies a position to control fires. The FDC comes up on the radio nets of the field artillery forward observers and also contacts the artillery air spotter. As soon as possible, the LVT(A)s are registered. Upon completion of the registration and upon order, the remaining LVT(A)s can occupy firing positions. When laid, they are ready to provide indirect fire support to the infantry battalion.

What about the liaison set-up at this time? Actually, there is no problem in this regard. The artillery liaison officer with the infantry battalion is on the forward observer radio net and is tied in just as soon as the LVT(A) company FDC and the forward observers are in communication. The artillery liaison officer advises the infantry battalion commander as to the employment of LVT(A) units acting in a field artillery role, just as he would advise on the employment of direct support artillery.

☛ UP TO THIS POINT we have one LVT (A) company providing direct support to each assault infantry battalion and the infantry regimental headquarters has not arrived ashore. What happens when the infantry regiment commander does come ashore? With him he will have a liaison party from the artillery. Up to this time the individual companies have been acting independently. Now, suppose the regimental commander wants to mass the fires of two companies on a target, such as a mechanized attack. To do this, the two companies are formed into the equivalent of a field artillery battalion group. That is, the senior company commander will become the controlling FDC and will receive all missions requiring the massing of both companies. Individual missions requested by the infantry battalions would continue to be fired by the company receiving the request.

With this set-up, the infantry regiment will now receive fire support from a weapon organic to the landing force that can be counted on no matter what the weather conditions or the enemy naval reaction, both or either of which might result in a loss of naval gunfire and air support.

To continue with the development of the situation ashore, we find the next major change of the LVT(A)s will occur when the direct support field artillery battalion arrives ashore. As soon as the light artillery battalion is in position, registered, and ready to fire, the LVT(A) companies are released from a direct support role and assume a reinforcing mission. This is accomplished by

the artillery battalion laying a wire line to the LVT(A) companies which will allow the FDC of the direct support battalion to control fires. The LVT(A) company group is dissolved as of the time the artillery battalion assumes control.

☛ WHEN THE ARTILLERY REGIMENT arrives ashore, LVT(A) units will operate under the artillery regimental FDC in a general support role, or the battalions may be ordered to continue their reinforcing role as described earlier.

The actions of the LVT(A) battalion in a field artillery role have been described in a few short paragraphs but preparation for that role is much more lengthy. First, the training period requires a great amount of time devoted to standardizing procedures. FDC operation, in particular, will take time. The allocation of time to this type of training must be specific and not just included when something is needed to fill in the schedule. With the thought in mind that operation in a field artillery role is the most important type of operation, a realistic approach to the problem of preparation can be made.

In describing the operation of LVT(A)s as field artillery, we have uncovered several gaps in both our T/O and T/E. We had to call on the artillery for aid in training. We had to borrow equipment. We had to get assistance in our communication. What can be done to remedy the situation? First, we should have an assistant S-3 for the battalion, of at least the rank of captain, who is a qualified field artilleryman. Each company should have a sergeant or above who is a qualified fire control man. The addition of these personnel will lessen the assistance required from the field artillery units who have their own training requirements. At least two four-man wire teams should be included to facilitate an early wire net within the battalion. The T/A should be revised to include the items mentioned earlier which are required for the laying of LVT(A)s as field artillery and for the operation of a fire direction center. A reevaluation of communication equipment must be made to include a certain amount of telephone equipment.

New LVT(A) equipment, which is on order, may facilitate the role of the LVT(A) as field artillery. Certain items of communication equipment are sure to help. This discussion, while intended to apply primarily to equipment and organizations now current, can be easily adapted to the new equipment forthcoming.

Whatever system is used for providing artillery support should not overlook the basic fact stated in the opening of this article—the LVT(A) is an amphibious artillery piece. Exploit its capabilities to your advantage! Don't keep such tremendous amounts of firepower, as possessed by the LVT(A) organizations, in reserve! And don't waste that firepower by inefficient use! USMC

KOREA AWARDS



Navy Cross

LtCol Virgil W. Banning, Pvt James T. Beard, 1stLt Van D. Bell, Sgt John W. Chinner, CWO Lloyd V. Dirst, Sgt Leland E. Ehrlich, PFC George W. Elmore, Sgt Charles Foster, PFC Walter W. George, 2dLt Austin C. Jenson, PFC Richard Matheney, 2dLt Harvey W. Nolan, 1stLt Chester O. Penney, Jr., Capt Walter D. Phillips, Jr., PFC Walter C. Shonk, LtCol John W. Stevens, II, 1stLt George S. Sullivan and 2dLt Leslie C. Williams.

Silver Star

PFC George A. Amyotte, 2dLt Robert L. Appleby, Sgt Lloyd E. Arne, TSgt John L. Arnold, Cpl Leroy A. Bose, Capt Thomas J. Bohannon, PFC Richard A. Bonnelly, PFC James L. Churchich, Cpl William C. Clark, PFC Paul M. Cloud, TSgt Stephen P. Compoly, Sgt Joseph P. Connelly, PFC William F. Doriot, PFC Richard Draper, Cpl Theodore B. Dufrain, PFC Leonard F. Enos, 1stLt Robert J. Epperson, 1stLt Donald L. Evans, Jr., 1stLt James L. Frazier, PFC Anton J. Freer, 2dLt Clarence W. Frieske, Sgt John O. Henry, 1stLt Norman W. Hicks, Cpl Richard Matheney, Capt Merlin T. Matthews, 1stLt William A. McClelland, 1stLt David D. Peppin, Cpl James Perkins, SSgt Louis Reed, Cpl Thomas P. Reffner, Maj Webb D. Sawyer, 2dLt Harry F. Schanning, and Cpl "B" "F" White.

Legion of Merit

Col Chester R. Allen, LtCol William P. Alston, Maj Gerald P. Averill, LtCol Virgil W. Banning, Col Arthur F. Binney, Col Custis Burton, Jr., LtCol Jino J. D'Alessandro, LtCol Edward V. Finn, Col Frank P. Hager, Jr., Col Bruce T. Hemphill, LtCol George W. Herring, LtCol Homer E. Hire, Col Woodrow M. Kessler, Col Richard C. Mangrum (2), Col Charles W. Mav, LtCol John A. McAlister, Maj David W. McFarland, Col Guy M. Morrow, 1stLt Jeremiah O'Leary, Jr., Col Edwin P. Pennebaker, Jr., Col Wesley M. Platt, Col Carson A. Roberts, Col Joseph P. Sayers, Col Martin A. Severson, LtCol William G. Thrash, LtCol James H. Tinsley, Col Richard G. Weede, LtCol John J. Wermuth, Jr., LtCol Robley E. West, and Col Thomas A. Wornham.

Distinguished Flying Cross

1stLt Arthur R. Bousquet, MSgt Carroll E. Brown, Capt Duane Dekalb, Capt David L. Ford, Maj Edwin J. Herman, Jr., (2d), Col Guy M. Morrow, 1stLt Wilfred C. Nicholas, 1stLt Eddie E. Pearcy, Capt Allan L. Phillips, Capt Donald J. Sauser, MSgt Don Scarboro, Capt Winfield S. Sharpe (3d), 1stLt Charles E. Showalter (2d), MSgt "O" M. Smith, MSgt

William J. Stuart, 2dLt Francis H. Thurston, MSgt Thomas H. Ullom, Capt Frederick A. Vernon, Capt James W. Verplanck, 2dLt Robert A. Walker, 1stLt John H. Walsh, TSgt Merrill L. Williams, 1stLt Richard D. Williamson (4th) Capt Frank E. Wilson, Capt Rex Wilson, Capt Richard A. Winters, 1stLt Allan T. Wood, 1stLt Joseph L. Wosser (3d), Capt Warren M. York, Jr. (3d), and 1stLt Vance L. Yount, Jr.

Navy and Marine Corps Medal

Cpl Charles P. Barrett, Jr., Sgt Lambdin W. Faulkner, PFC Grant D. Parris, SSgt Thomas E. Tuck, and PFC Rene L. Wattelet.

Bronze Star

SSgt Robert B. Adkins, 1stLt John C. Alexander, Cpl Marion J. Bogdanovich, Cpl Jack M. Bryan, Sgt Robert A. Buell, PFC Domic M. Bulgarella, 1stLt James L. Burnett, Sgt Buddy L. Burris, PFC Robert N. Carey, Cpl Earnest M. Carroll, Cpl Frank J. Carmichael, Cpl Robert L. Carpentier, PFC Jimmy L. Cloud, Capt Harold R. Connolly, MSgt Parke L. Cory, 1stLt Henry M. Dahlquist, Sgt David N. Day, Cpl Richard A. Deloreto, PFC William H. Douglas, Cpl Frank E. Kelley, PFC Arthur F. Kloppenburg, Cpl William J. Knabe, Capt Eugene F. Langan, Cpl Arthur T. LaPorte, 1stLt Peter Larghey, TSgt Arthur C. Larson, 1stLt William F. Markgraf, Sgt Donald R. McCracken, PFC Donald V. Miles, PFC Jack W. Mills, SSgt Clyde T. Pitts, Sgt Donald E. Ponto, Cpl Robert W. Raitz, Cpl Ralph R. Rowe, MSgt Astle A. Ryder, SSgt Robert D. Scott, 2dLt George S. Shepherd, Sgt Michael J. Siliwono, Sgt Willard Simms, Cpl Robert L. Simonton, Sgt Robert G. Skidmore, Cpl Clarence G. Smith, PFC Frank L. Stone, Sgt George A. Svicarovich, PFC Estel Tuggle, Maj Charles E. Walker, SSgt Henry R. Walters, Cpl Conway D. Wendland, Cpl Robert L. Westland, PFC Thomas J. White, Jr., 2dLt Russell H. Whitla, Jr., 1stLt Charles S. Wilder 1stLt James E. Williams, Sgt Walter I. Wilson, PFC Adolph D. Wisniewski, Capt Herbert M. Witcombe, Maj Victor F. Wojick, Sgt Walter Wojton, and Cpl Lowell T. Wolfe.



AN ARTICLE APPEARED IN THE MARINE CORPS GAZETTE *is the Answer*. The author believes that for the services by the that voluntary enlistment one particular paragraph

"It is indeed a sad long refused to look for more than one occasion cross-breed conscription with a volunteer enlistment program only to produce a hybrid that was both unfertile and inutile. The significant point missed by the critics of selective service is that the evidence proves conclusively the military forces of this country have prospered in spite of volunteering and not because of it."

To defend such a position is as hopeless as one battery of artillery taking on a tank. All the strength, the facts, are on the side of continuing volunteer recruiting procedures! There is an increasing tendency to refer to "competition" between recruiting agencies and draft agencies for manpower. This would be like a husband and wife "competing" with each other in contributing to their joint savings account. Every man enlisted in any of the services is immediately reported to the state Director of Selective Service, and is credited by National Headquarters of Selective Service against that state's quota for inductees. This credit is further given to the local community. Each man that enlists from a local board area is credited against that board's quota. This means that the board

it from its area, that It also cuts down which enlisted that man. only as the means of when voluntary means voluntary function which it gives to volunteered. Both means of In this article and supported:

1. Volunteering procedures are cheaper.
2. Volunteers reduce training costs because of their longer period of service.
3. They render longer *useful* service per period of total service while drawing fewer men from the manpower pool.
4. Volunteer procedures enable the services to maintain a higher state of readiness.
5. The period of induction requires that more trained personnel be diverted from combatant units to be trainers and instructors of inductees than is required for volunteers.
6. Cross breeding of volunteer procedures with conscription does not produce an "infertile and inutile" hybrid but a most profitable, useful, and prolific system.

The supporting illustrations cannot be drawn from the Revolutionary War when there was no U. S. Government, nor from the War of 1812 nor from the Civil War when the nation was divided. We're talking about today;

this will present an objective evaluation of the *current* situation.

Let's look into the systems a bit to see why those six points above are true—today. The approximate cost to Selective Service of one draftee is \$83.00. This apparently includes sending out preinduction and induction notices, administering the system, giving each man a draft classification (I-A, IV-F, etc.) and two tickets—a round trip and a one-way—to the induction station. Examination costs (mental tests, physical exam, X-rays, serologicals, etc.), induction and allocation costs are all paid for by the military. These latter costs are estimated conservatively to average another \$40.00 per inductee. It's higher than for an enlistee because the inductee gets one full exam (preinduction exam) then returns home and goes up later for a second short check-up (induction physical), while the volunteer does not get this dual handling; he goes just once. These two expenses add up to a total cost per draftee of \$123.00 from home to service. A volunteer costs the Government only about \$60.00;



savings, \$63.00!! This doesn't seem like a lot of money until we multiply it by the number of people enlisting in all services for only one month. In January of this year for example, over \$3,000,000 more would have been spent to get the same number of men for shorter periods of service by induction alone. It is obvious then, that it is cheaper to get volunteers to the services than inductees.

This is only the beginning of the economies that the Government accrues through the volunteer term of service, and the smallest. Many of the economies that accrue later in his career are not accountable in dollar terms without considerably more research than could be accomplished by this writer—such things as additional facilities, the more frequent transfers required because of the shorter service of inductees, replacement costs, and on-the-job training to produce a new replacement familiar with his duties. These "hidden" costs, and many others, could only be identified—not itemized and computed. Others are less hidden, and I will make the best estimate possible with the information I was able to obtain on short notice. In the figures that follow, as in the procurement costs just cited, I have used in each case, statistics that are easily verified. Where figures were not obtainable directly in the form most valuable for this paper, inferences have been drawn, in each case giving the benefit of any doubt to the induction side.

☛ ONE OF THE INCREASED COSTS resulting from the two-year service of inductees is the duplication of training, equipment, administration, travel, etc., required by the rapid turnover of inductees. Both volunteer and inductee get the same recruit training averaging about three months for all services. After recruit training many are assigned to specialist and advanced training programs ranging in length from a few weeks to a year or more depending upon the specialty to which the individual is assigned. All the initial training a man must receive before he can be used on a job has been estimated to average about six months per recruit for all services whether the man enlists or is drafted. The average *initial training cost* for all services is approximately \$3200. This includes pay, subsistence, training overhead, clothing issue, etc., and must be repeated for each new man coming into the service. The obligated service of an inductee is set by law at two years, and is not likely to be changed, at least not to a longer period (the Department of Defense in connection with hearings on the UMTS Act last spring recommended 27 months). Certainly the two-year induction period will not be extended long enough to compare favorably with that of voluntary enlistments which are for three, four, or six years. Keeping this in mind, Figure 1 shows the training and out-processing costs for an equal length of services of inductees and volunteers.

	Training	Out- processing	Training	Out- processing	Total
2 Inductees	\$3200	\$160	\$3200	\$160	\$6720
1 Volunteer	\$3200	none	none	\$160	3360
	2 Years		2 Years		\$3360 SAVINGS!!

FIGURE 1

It is apparent that two inductees cost \$3360 more to train and discharge than one 4-year volunteer!

The dollar cost of any item to support the Armed Forces is without question a very important consideration. Without too much detail and without attempting to cover all the facets, I believe the foregoing depicts and substantiates the statement that the expense of procuring and training a volunteer is far less than for the inductee. To many, these savings to the country, the taxpayer, the citizen, alone are sufficient reason to continue voluntary procurement procedures. Particularly is this true when the dollars and cents costs are thought of, not for one man, but in the light of the great number of men procured by the four services yearly by voluntary means. Assume that last year the services procured 300,000 men for four-year enlistments, which is well within the actual figure. By simple arithmetic, enough men to do the same job for the same length of time, if procured by the draft, would cost \$37,800,000 more to procure and \$1,008,000,000 more to train. It is conceded that some drafted men would re-enlist and thereby reduce the training cost, but experience has shown that the numbers who would choose to do this are very small.

❖ NO PERSON, BUSINESS, OR INDUSTRY would spend without thought to the dollar value received. This very same, sound procedure can be followed with the subject at hand.

In any period of service, there are non-productive factors or non-usable time that reduce the productive or

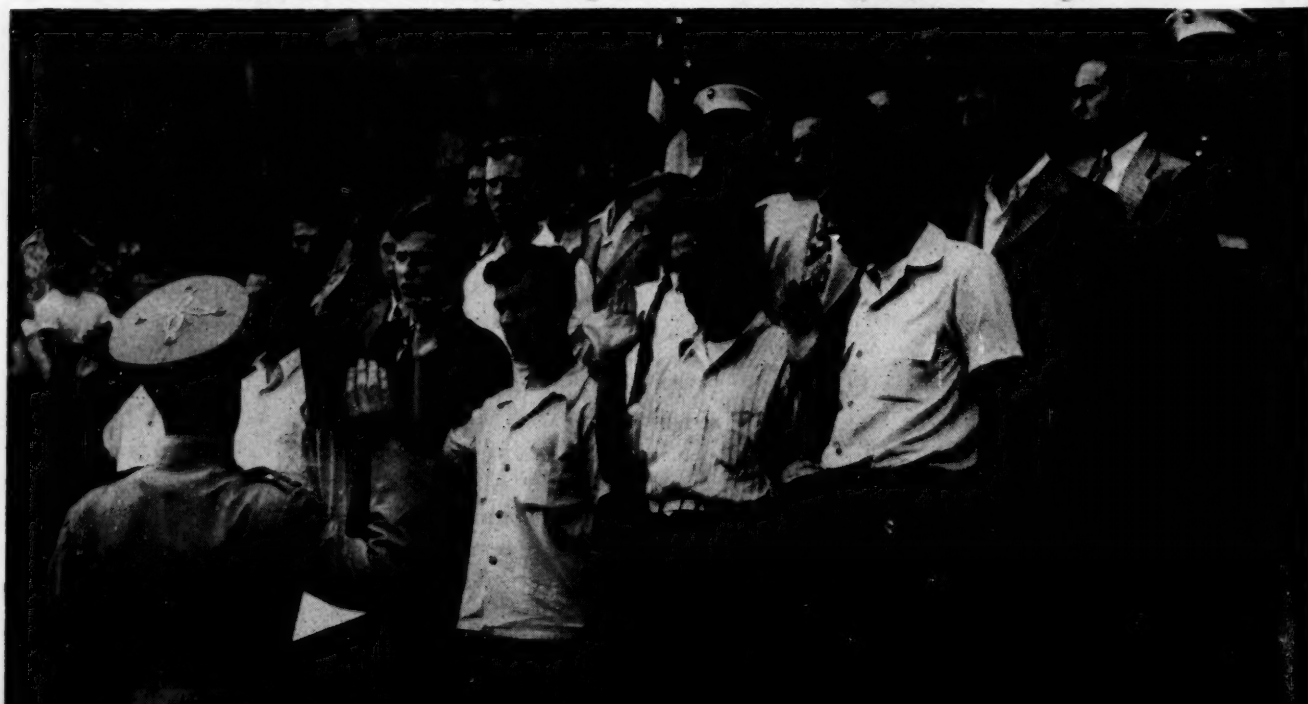
usable time of any individual. They are common to each individual and occur with equal regularity in almost all cases. Such factors as training time, travel, leave, sickness, administrative loss, out-processing time, and the like must be averaged out by the planner and applied in all personnel plans. This time corresponds in a sense, to the time and expense of manufacturing an article for sale. If this cost can be reduced, either the profit is greater or the price can be lowered. Let's assume that the following are the time loss factors occurring in the case of one volunteer and two inductees. Two inductees are used to equal the length of service of one 4-year volunteer and the greatest number of enlistments by far are for the 4-year enlistment period. It is readily apparent that if there is an error in estimated time factors it will equally affect the case of the volunteer and inductee and will not give a prejudiced picture in any event.

Time Loss Factors		
	2 Inductees	One 4-Year Volunteer
Average initial training time	12 months	6 months
Leave (1 month per year)	4 months	4 months
Average travel to and from duty stations	4 months	2 months
Sick, lame, lazy	1 month	1 month
Administrative loss, out-processing	1 month	1/2 month
TOTAL TIME LOST	22 months	13 1/2 months

FIGURE 2

By studying Figure 2, it is immediately obvious that the services get 8.5 months more service in addition to a

These men are continuing the long tradition of volunteering to be "First to Fight"



savings of \$3360 for each volunteer recruited.

Still the advantages pile up. As is well known in the U. S., the male population of military age is at a comparatively low level at the present, and will continue to be for some time to come. This shortage is the result of the low birth rate during the depression. Whenever there is a shortage of any kind there are several alternatives. One is to do without that material—to do so in this case would be committing national suicide. Another alternative is to find or make a substitute—a synthetic. So far no suitable substitute for men has been found. The only practicable solution for this shortage is to make the best possible use of what we have, i.e., to get the most out of what there is, and to drain our supply as slowly as possible. We may need to maintain our present levels of military strength for a considerable length of time even though there is no actual full-scale war. At any time short of a state of war, generally speaking a man is "used-up" for military purposes once he has been drafted or enlisted and is discharged.

If voluntary recruiting were discontinued this fiscal year, the manpower pool of military age males would be exhausted sometime in fiscal year 1954. If this happened, student and dependency deferments would have to be tightened and possibly the age limits (now 18½ to 26) for induction would have to be expanded. These measures would be only temporary and would not forestall the depletion of the pool long enough for the higher birth rates of the '40s to begin to build it up again.

Figure 1 shows how one 4-year volunteer fills a requirement which takes two 2-year inductees to equal—in total time only. Actually of course, the two inductees' productive service is shorter than the volunteer's and thereby doesn't completely match his contribution. This is certainly no reflection on the efforts of inductees—it is purely a result of the short induction period. Therefore, one 4-year volunteer in effect *adds* more than one man to the manpower pool. To do away with voluntary enlistment would reduce this pool at more than twice the present rate.

All dollar expenditures and manpower requirements are toward the common end of having and supporting a force with a predetermined required state of effectiveness and readiness. It is vital that the services continually strive to reduce administrative overhead, "armchair jobs," and get men in the operating, the fighting forces. To require the services to use two-year inductees exclusively would require a very substantial increase in personnel ceilings of all the services to maintain the present state of readiness and effectiveness. Combat readiness would be significantly lowered by: (1) a more rapid rate of turnover of personnel; (2) the requirement to be continuously concerned with the training of replacements in advance of this turnover; and (3) the resultant require-

ment to divert trained personnel from combatant units to be trainers of the new personnel.

Even if the foregoing factors of cost, productive service, manpower saved, effectiveness and readiness of the services, and the continual training and replacing problems had not been tabulated, the case would stand for volunteer procedures on none other than the Freedom of Choice. The protection of this democratic principle is a very fundamental justification for the existence of a military establishment. Today's American young man is blessed with the choice of education, job, career, school, and employer and with his own decision to quit, change, or modify any one. To single out the choice of a military career and say that this basic right is not applicable, has the effect of degrading or condemning both the military profession and service to one's country.

The argument that an individual may volunteer for induction and express a preference or choice of service is misleading.

Realistically, the chances of getting the choice of service through this procedure are practically lacking. All men delivered by Selective Service to the induction stations must be pro-rated or allocated to the services in accordance with the size of each service's call. For example, all men inducted in one month may be required to be divided 50% to Army, 30% to Air Force, 15% to Navy and 5% to the Marine Corps. At the same time, individuals must be still further allocated by four mental groups to insure equitable distribution among the services. It is not difficult to perceive that after all these distributions have taken place, and the books balanced, a man's choice plays a very insignificant role.

Not too long ago, when only the Army and Marine Corps were using induction, a Marine officer's brother-in-law was inducted with five of his acquaintances. All six requested the Marine Corps. None *got* the Marine Corps. The six were assigned to the Army!! This undoubtedly occurs with equal frequency the other way around. Imagine how many times this would occur if all four services were dependent solely on induction!!

The most effective evidence that young men highly regard the opportunity to select the time of entry into military service and the service of their choice is that 609,000 young men followed the "glorious volunteer tradition" in fiscal year 1951 alone!!

Yes, thank God, our "wishful legislators" show deep insight in legislating to insure the preservation of this highly regarded principle of Freedom of Choice; that they have seen the inherent values of competition and the evils of centralized manpower control which would further and unduly restrict the rights of young men; that through their vested interests they have not legislated on a "hybrid that was both unfertile and inutile" but have established a procurement system that is most profitable, useful, prolific, and democratic.

USMC

An amphibious primer:



A LITTLE FOR



By Capt Richard A. Ward

THE WAR BETWEEN THE STATES HAS BEEN COVERED at great length by many qualified authors, but in nearly every instance one important technique of war has been neglected or given a back seat. This phase of warfare is the amphibious assault of a hostile coast. The neglect of this in the battle here cited has been due, I believe, in large part to the fact that relatively small numbers of troops were involved, and hence the scale of the battle fought after the landing was quite small in comparison to others. The strategic reasons for the series of landings on the coastline and river banks of North Carolina in 1861-1862 were nevertheless important, and it is well that some indication be made of why an expedition was sent several hundred miles down a hostile shore to conduct operations behind the Confederate lines.

The strategic mission of the operation, an effort to help tip the scales in favor of the Union forces in their conflict with the Confederates in the Peninsula, was resolved in Burnside's plan for the accomplishment of two objectives:

(1) To compel the Confederates to withdraw a portion of their forces then opposing the Union pressure on Richmond in order to counter the threat posed by a Union landing force located in and operating against their rear.

(2) To harass and, if possible, to destroy the lines of communication supporting and sustaining those same Confederate forces protecting Richmond.

The inlets of Hatteras, Ocracoke, and Beaufort were all important to the Confederacy and in particular to the State of North Carolina, since most of the water-borne commerce of the state entered these inlets and proceeded on the waterways to the ports of New Bern, Washington, and the Albermarle Sound cities of Plymouth, Edenton, and Elizabeth City.

The only railroad inland from the coast was the Atlantic and North Carolina Railroad which connected New Bern with Raleigh and the interior. Therefore, the denial of both the inland waterway and the railhead of New Bern was paramount in any scheme for cutting the flow of supplies to the Army in Virginia.

In October of 1861, BrigGen A. E. Burnside presented his plan of operations to Gen McClellan for his approval and endorsement to the Secretary of War. It was ultimately approved and Burnside was ordered to New York to fit out the fleet. On October 23d, orders were issued establishing the headquarters of the division, to be known as Burnside's Coastal Division, at Annapolis, Maryland.

The fleet, consisting of shallow-draft steamers, sailing vessels, and barges, was a motley one. North River barges and "propellers" had been strengthened from deck to keelson by heavy oak planks, and water-tight compartments had been built in them. They were so arranged that parapets of sand bags and bales of hay could

NEW BERN

ILLUSTRATED BY PFC ANTHONY KOKINOS

be built on the decks. Each vessel carried from four to six guns; sailing ships, formerly coastal traders, had been fitted out in much the same way. Several large passenger steamers, which were guaranteed to draw less than eight feet, together with tugs and ferries made up the remainder of the fleet. These transports had an overall capacity of some 15,000 troops with their combat equipment and rations. Other sailing vessels were procured to transport bridging materials, entrenching tools, rafts, extra ordnance stores, and the like.

The division had been divided into three brigades which were commanded by Generals J. G. Foster, Jesse L. Reno, and John G. Parke, three of Burnside's "most trusted friends."

The fleet of transports all finally arrived at Annapolis Harbor by the 4th of January, 1862, and on this date the orders for the embarkation of the division were promulgated. Embarkation began on the morning of the 5th and was not completed until the last regiment went aboard on the 8th.

The command of the fleet was vested in Commodore Louis M. Goldsborough, USN, who at this time had already served for over 50 years in the Navy.

Although most of the vessels of the expedition left Hampton Roads during the night of January 11th, there were some which were unable to sail for a day or two. The fleet encountered a severe storm off Cape Hatteras which scattered the ships and wrecked several. The great majority, however, reached Hatteras Inlet in safety and anchored there.

As was stated previously, eight feet was the maximum draft allowable for the vessels. Prior intelligence had promised at least that amount of water over the bar at

Ninety years ago a Union general combat-loaded 15,000 men in river boats, landed on a Carolina river bank, and took the city of New Bern. He was setting the stage for amphibious warfare Marines know today



Gen Ambrose E. Burnside

Hatteras. Whether this information was faulty or whether the storm had caused some shift in the sand was never learned, but, nevertheless, great difficulty was encountered in crossing the bar or swash into Pamlico Sound.

A novel method was devised to dredge a channel for the larger ships of the fleet. These vessels were driven onto the bar under full steam while the tide was ebbing, and the anchor was carried forward by a small boat to hold the ship in position. The strong current then washed the sand from beneath the vessel, thus allowing her to make another run farther onto the bar. This process was continued for several days during which time a broad channel to a depth of over eight feet was opened, thus enabling the remaining fleet to complete its passage into the sound by February 4th.

Burnside's plan called for seizure of Roanoke Island preceding the invasion of the mainland proper. This undertaking was considered mandatory since the island commanded the approaches to Albemarle Sound as well as Plymouth and Edenton beyond. Following this engagement, which was concluded successfully in two days, the troops were allowed to rest ashore until their re-embarkation and departure for the mainland.

New Bern, the county seat of Craven County, had in 1862 a population of about 5,500. It is situated at the confluence of two rivers, the Trent and the Neuse, the former constituting the southern boundary of the city and the latter its eastern. It derives its name from the fact that a colony of Swiss, under the direction of the Baron de Graffenreid, had settled on the banks of the

Neuse near the beginning of the 18th century and had brought with them the name of their home capital. Settings more dissimilar than those of Berne on the Aar, and New Berne (its early spelling) on the Neuse could hardly be imagined, but the name itself may have relieved some of the early settlers' pangs of nostalgia. In the provincial days New Bern was the capital of what was to be the Old North State.

New Bern, with its good harbor, carried on quite a bit of commerce by sea as well as inland via the Atlantic and North Carolina Railroad which joined at Goldsboro with the other railways connecting Richmond with the remainder of the Confederacy.

During the delay incident to the replenishment of supplies, Burnside sent spies to New Bern, and through one of them received information of the garrison and defenses as of March 7th. On the basis of this most current information, Burnside chose March 13th as D-day.

The division, some 15,000 in number, embarked and sailed on the morning of the 11th for a rendezvous off Hatteras with the remainder of the fleet. It arrived at dusk, but yet in time to distribute mail which had arrived aboard the steamer *Suwanee*. One writer states that "for once Hatteras had declared a truce;" the weather was perfect.

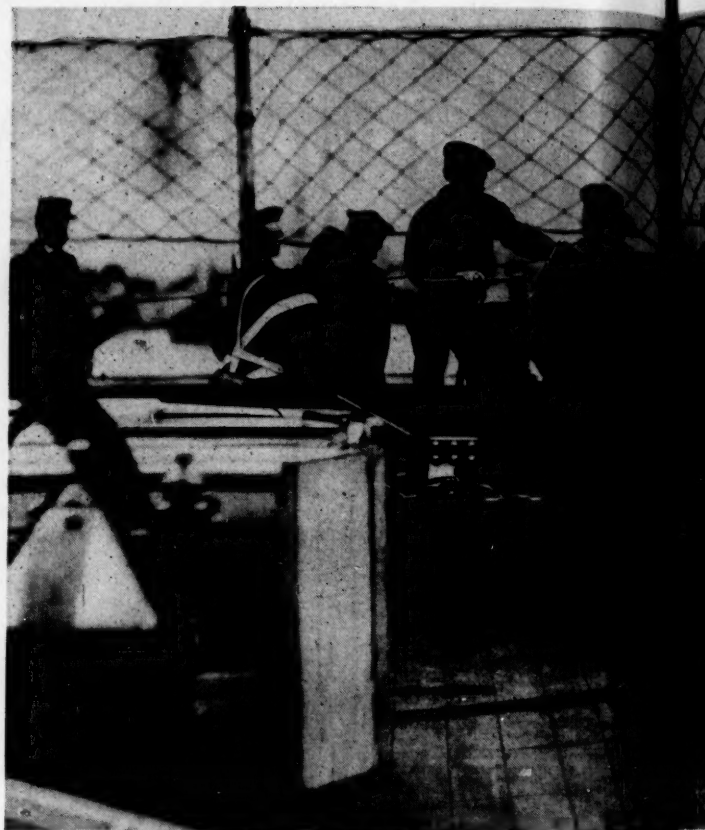
At an early hour the following morning the fleet, now under Commodore J. C. Brown, USN (who had relieved Goldsborough after the Roanoke action) began moving northward in double column with each troop brigade split between the two files; the 1st Brigade in the lead. Half a mile ahead of the transports the gunboats moved in line of battle covering the main fleet of 60 vessels.

At 1400 they entered the Neuse River which is, at its mouth, an estuary 12 miles wide. The approach of the Federal fleet was announced to the Confederate outposts up and down the river by means of fires which gave forth pillars of black smoke.

As darkness approached the sky showed signs of an approaching storm, and it was not until 2100 that the fleet anchored off the mouth of Slocum's Creek. This area, which is now the site of the U. S. Marine Corps Air Station at Cherry Point, is about 12 miles below New Bern by river and 17 by land. Here were the beaches over which Burnside elected to land his troops.

By morning of the 13th of March drenching rain was falling and at 0700 the signal, "Land the Landing Force," was given. Each man carried on his person three day's rations, 40 rounds of ammunition, an overcoat, and rubber blankets.

The supporting naval force shelled the landing area in an effort to neutralize it during the movement of the boats toward the shore. As regards the ship to shore movement, this landing paralleled that of Roanoke Island in that the troops transferred to launches, which were taken in tow by the steam tugs, each pulling a long line of



Nine-inch gun mount, main battery aft, on gunboat



Gen John G. Foster

y aft, on gunboat *Commodore Barney*

these boats. At a signal the tugs steamed as near the beach as they could and released their tows, the momentum gained sending the launches forward until aground. The men then jumped overboard into waist-deep water and waded ashore. The landing was unopposed and the troops moved off the beach as rapidly as the mud would permit.

At about this time the schooner *Crocker*, with part of Battery F, 1st Rhode Island Light Artillery embarked, attempted to enter Slocum's Creek and in so doing ran aground. Although tugs were brought to her assistance, night came and she remained fast in the mud. Early on the morning of the 14th the schooner was floated, and as the forces ashore had advanced, instead of landing at Slocum's Creek the vessel was towed two or three miles farther up the river, where a landing was made.

The landing itself was a difficult maneuver with the equipment at hand. The pieces and caissons were rafted by means of a platform built on two yawls lashed together. The raft was then floated to shore until it grounded, the artillery pieces being pulled ashore by hand from there. The horses were driven overboard and towed ashore. Ironically, this battery of artillery arrived at the front too late to fire a shot despite the great difficulty

encountered and effort expended in its landing.

The 21st Massachusetts Regt (of Reno's Brigade), deployed as skirmishers, led the advance; the 24th Massachusetts under the supervision of Gen Foster moved up the road in support of the 21st followed by the rest of the brigade as landed. The head of the column had proceeded about six miles and was approaching Otter Creek when a report came back that heavy fortifications, apparently deserted, had been located to the front. These consisted of well-constructed breastworks extending from the river to the railroad, a mile distant; a fort guarding the river flank; and four flanking bastions facing the railroad terminus—the whole position protected by abatis and a deep, wide ditch along its front.

Resting here until three o'clock while waiting for the force in the rear to close up, Gen Burnside ordered Foster with his brigade to advance by the turnpike, Reno by the railroad, while Gen Parke was to follow Foster, prepared to support either command as needed. "The rain continued to fall the entire day, and the roads—at best but sloughs—were churned to a sticky pulp of uncertain depth, so that progress was slow and difficult."

This march continued until late that evening when the order to halt was given and the troops bivouacked in the woods. The rain continued to fall making the night



miserable for troops on both sides. The following parody may have been in many minds that night:

"Now I lay me down to sleep,
In mud that's many fathoms deep;
If I'm not here when you awake,
Just hunt me up with an oyster rake"

Sunrise of the 14th, a little after six o'clock, saw everyone moving about. Breakfast was very informal, the troops subsisting on some of the rations they had carried ashore.

It was not long after daylight that the sound of small-arms fire was heard on the left and the regiments fell into line and moved on. Though the rain had ceased, there was a thick fog which greatly restricted visibility. It seems that the camp had been pitched very near the Confederates', for the advance guard had moved out only a short distance when earthworks interdicting the road were discovered just a few hundred yards from the area of the preceding night's bivouac. A detachment was sent forward to reconnoiter. It soon returned stating that "the fortification seemed to be long and strong with artillery, and filled with infantry and cavalry." It appeared that this was the location the Southern leader had chosen to defend. The earthwork extended from the Neuse, near Fort Thompson, a mile and a half inland

(west) to a swamp which extended southward in the direction of Morehead City.

At Gen Foster's command, Col Stevenson led the 24th Massachusetts into a field at the right of the road and formed a line parallel to the Confederate breastworks. The 25th Massachusetts, passing behind the 24th, formed on its right with four companies nearest the river drawn back to protect the flank. This position proved untenable because of the nearness of Fort Thompson and the danger from the gunboats firing on the fort from the river. Col Upton was forced to re-group the 25th to the left of the road, thus compelling the 24th to hold the right flank.

As originally placed, the 27th Massachusetts was on the left of the road and supporting a battery; the new position of the 25th must have crowded the 27th somewhat. Next, towards the left was the 23d Massachusetts and the 10th Connecticut, which completed the 1st Brigade. (Later in the day the 11th and the 8th Connecticut of the 3d Brigade moved in on either side of the 23d, the latter retiring for replenishment of ammunition.) Gen Parke's 3d Brigade formed the center of the Union line and Reno's 2d held the Union left. Opposed to these troops were the North Carolina regiments in the following order from the left: 27th, 37th, 7th, 35th, 33d, and 26th. The 28th reached the field just in time



to cover the withdrawal of the Confederates. The Confederate batteries engaged were the guns of Fort Thompson, then Whitford's, Leecraft's, Herring's, Evans', Latham's, Mayo's, and Brem's. The artillery belonging to Burnside, consisting only of a few howitzers from the fleet, was noticeably absent. The men who helped haul these guns through the mud thought them "altogether too many." No mention is made of the disposition of the horses brought ashore with the light artillery. They were probably unable to negotiate the swampy ground pulling their pieces, so were left at the rear.

Col R. P. Campbell, 7th North Carolina (West Point, 1840) in command of the Confederate right wing, was delivered the following message by a Union runner: "Reub, quit your foolishness, and come back to the Union Army." Col Campbell who had known Burnside at the Academy replied: "Tell General Burnside to go to the devil where he belongs."

Col C. C. Lee of the 37th North Carolina commanded the left wing.

Gen L. O'B. Branch, while exercising a general superintendence of the whole line, was in immediate command of the center and the reserve.

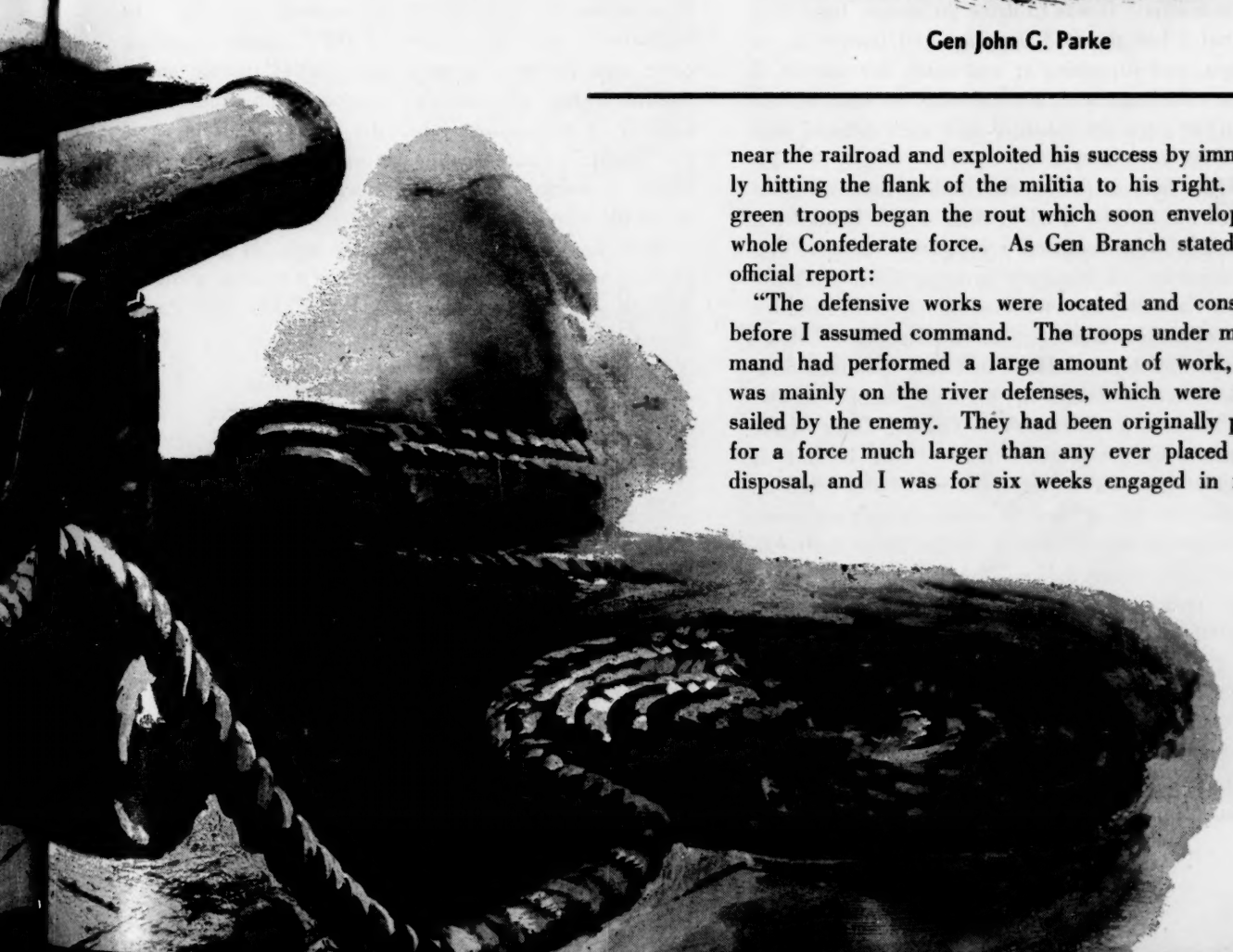
As the fighting progressed, Foster was unable to make any great headway against the forces of Col Lee. Gen Reno, on the other hand, gained a penetration of the line



Gen John G. Parke

near the railroad and exploited his success by immediately hitting the flank of the militia to his right. These green troops began the rout which soon enveloped the whole Confederate force. As Gen Branch stated in his official report:

"The defensive works were located and constructed before I assumed command. The troops under my command had performed a large amount of work, but it was mainly on the river defenses, which were not assailed by the enemy. They had been originally planned for a force much larger than any ever placed at my disposal, and I was for six weeks engaged in making



the necessary changes to contract them, but the failure of all my efforts to obtain implements and tools with which the troops could carry on the work prevailed me from making satisfactory progress. I had circulated handbills over the state, calling on the citizens generally to assist me, and received from two counties a small party of free negroes without implements. I then inserted in the newspaper an advertisement calling on the slave-owners to hire their slaves, with implements, for a few days, and I got but a single negro. During all this time I continued the troops at work, and when the enemy came into the river, 500 per day were being detailed to construct breastworks, with less than half that number of worn and broken shovels and axes, without picks or grubbing hoes. If the fate of New Berne shall prevent a similar supineness on the part of citizens, and especially slave-owners, elsewhere, it will be fortunate for the country.

"At about 0730 on Friday morning (the 14th of March), the fire opened along the line from the railroad to the river. I soon received a message from Col Lee (commanding the Confederate left wing) that the enemy were attempting to turn our left. This proved to be a feint, as I replied to him that I thought it would. The next incident of the battle was the appearance of the enemy's skirmishers in front of Vance (26th North Carolina), and subsequently on the prolongation of the line held by the militia. It was to drive the enemy from that position that I had directed the 24-pound battery to be placed there, and supposing it was ready for service, I sent Captain Rodman with his company to man it, but they found the guns not mounted and were ordered into position to act as infantry.

"The skirmishers of the enemy, finding themselves on the flank of the militia, fired at them a few shots from their flank files, which caused a portion of them to flee in great disorder. I instantly ordered Colonel Avery (33d North Carolina) to send five companies to dislodge them. He sent them instantly, under Lieutenant Colonel Hoke; but before Colonel Hoke had fully got into position, though he moved with the greatest promptness and celerity, I received a message from Colonel Clark of the militia, informing me that the enemy were in line of battle in great force on his right. I instantly ordered up the remaining five companies of Colonel Avery's regiment, and the whole 10 opened a terrific fire from their Enfield rifles. The whole militia, however, had not abandoned their positions, and the utmost exertions of myself and my staff could not rally them. Colonel Sinclair's regiment (35th) very quickly followed their example, retreating in the utmost disorder. This laid open Haywood's (7th) right, and a large portion of the breastwork was left vacant. I had not a man with whom to reoccupy it, and the enemy soon poured in a column along the railroad and through a portion of the cut down ground

in front, and marched up behind the breastwork to attack what was left of Campbell's command (7th). The brave 7th met them with the bayonet and drove them headlong over the parapet, inflicting heavy loss upon them as they fled; but soon returning with heavy reinforcements, not less than five or six regiments, the 7th was obliged to yield, falling back slowly and in order. Seeing the enemy behind the breastwork, without a single man to place in the gap through which he was entering and finding the day lost, my next care was to secure the retreat."

This withdrawal took place over the railroad bridge spanning the Trent River (about 700 feet wide at this point). The bridge had been prepared for destruction, and it was set afire as the last of the Southern troops passed over.

Commodore Rowan, whose ships had been giving continuous gunfire support, was called upon to transport the division once more. A ferry service was set up, and by evening of the 14th of March the burning city was completely occupied.

Says Woodbury's History of the 9th Army Corps; "It was a peculiar conflict, and it may be doubted if another such was fought during the war. A bold attack upon a strongly fortified position, heavily armed and abundantly manned, made by a force of infantry without siege guns, or anything but a few howitzers." Here again the main point was missed entirely. The comparative ease of capture of the Confederate strong point was due to a general lowering of morale and a definite feeling of insecurity engendered by the sudden landing of a division of infantry some 200 miles from the "front." Southern historic papers say: "... this force, appearing suddenly, struck terror and dismay along the whole coast."

Here, in 1862, nearly a century ago, an amphibious landing was carried out with positive success using essentially the same techniques for which the Marine Corps is famous today.

1. The preparatory naval bombardment.
2. The ship-to-shore movement of infantry.
3. The movement ashore of organic artillery.
4. The close support of the landing force by naval gunfire.
5. The conduct of normal land warfare ashore.

Considering the equipment with which this expedition carried out its mission, it is surprising that such results were obtained. Imaginative projection of the operations evolution, thorough planning and attention to detail in accordance with the expected turn of events, and at the same time retention of sufficient flexibility to permit adaptation to unforeseen circumstances were as essential to this amphibious action, as to any subsequent landings of later wars.

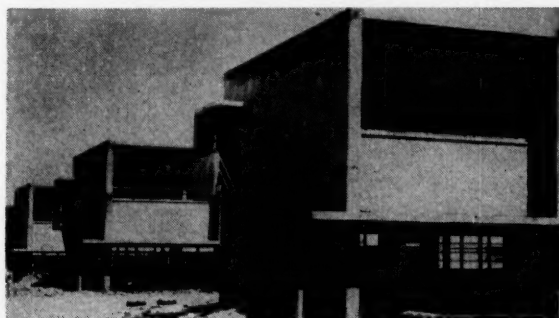
USMC

In Brief

Out of the water and onto a rocky beach at 30 mph (right) failed to harm this experimental plastic storm boat in torture tests at Fort Belvoir, Va. Molded in one piece and designed for river crossings and light assaults, it is the little brother of prospective plastic landing craft.



First U. S. jet interceptor with all-rocket armament is the new Lockheed Starfire (above), designed for long-range radar firing at enemy bombers. Firing tubes for 24 rockets form a ring around the nose.



A \$4,000,000 modern barracks project (above) is nearing completion at the Marine Corps' biggest base, Camp Pendleton, Cal. A far cry from ordinary barracks, these are designed for maximum comfort and safety in functional style architecture.

A new twin-jet fighter has been developed by the Soviets, presumably for use as a night fighter or close support craft. From the scanty information available, the new plane is about 28 feet long, with a wing span of about 26 feet. The power plant consists of two axial flow turbojets, possibly M-012s, which would give the Russian model a thrust of 13,000 pounds—approaching that of the larger British Canberra.

America's newest tank, the Patton 48 (below), has just been unveiled at the Chrysler Delaware Tank Plant. Extreme maneuverability, low silhouette, one piece armor, and improved firepower are said to make the Patton a fighting match for any medium tank known to exist. Armament features a quick-change, high velocity 90mm gun.



TRIAL



By LtCol L. Metzger, LtCol H. L. Oppenheimer, and LtComdr O. W. Price

ICE



☛ THE TIME IS JUNE, 1954. THE PLACE IS MARINE headquarters, Washington, D. C. A message has come in that a weather patrol plane of the Alaskan air theater has just reported the landing of approximately 30 Purple detachments scattered along the arctic coast from the Alaskan-Canadian border to 300 miles east of the Mackenzie River mouth. The detachments seemed to range from 100 to 200 men in strength and to be equipped with a considerable amount of heavy unidentified machinery.

It is estimated that it would take approximately four months for either the American or Canadian armies to mount and equip a force strong enough to cope with these units plus reinforcements that could be brought in. We still control the surface of the sea lanes south of the arctic ice pack running from Siberia to the Mackenzie Basin, but it is believed that Purple has the capability of doubling the strength of these detachments every 10 days

by air drop together with furnishing sufficient supplies to maintain them through the winter.

A directive to the Marine Corps reads as follows:

"Move one brigade, reinforced, to the mouth of the Mackenzie River immediately with the following priority of missions:

1. Establish an advance base and seize terrain dominating the entrance to the river in order to establish an advanced naval base.
2. Seize ground in the vicinity for an airfield.

In an age of atomic bombers, advance bases will lie along the desolate polar routes. Are Marines ready for ice-covered beachheads?

3. Determine nature of enemy installations.
4. Destroy as many of these installations as possible.

One battalion of paratroops with aircraft sufficient for its lifting will be made available to your task force commander."

While the unexpectedness of this directive caused a certain amount of initial confusion at Marine headquarters, the various staff sections began to function and the wheels began to roll. While this was going on there was naturally tremendous excitement in the United States and Canada and the military news commentators were asking the following questions and making the following statements:

"Why worry about Purple detachments along the arctic seaboard? What can they do? Let them die on the vine. Let them freeze on the vine."

"Call in our divisions from Europe immediately and send them into the arctic to protect our continent."

"Why did they pick the Marine Corps for this job?"

"Can ships be moved into this area in the summer by sea?"

"What will happen when winter comes? Can we supply a brigade during a winter campaign there?"

"How many people can Purple bring there and still supply them during the winter?"

"Can troops fight in the arctic? How cold does this area get?"

"What about planes? Can you get air support at 50° below zero?"

"What about land transport? Roads? Tanks? Over-

snow vehicles? How can vehicles get enough fuel?"

"How long does it take to train troops for arctic warfare? What do they have to know? What about ski troops?"

Peculiarities of Arctic Warfare

ARCTIC WARFARE DIFFERS from warfare in temperate climates particularly in this one fact: Mistakes that are insignificant or only irritating in temperate zones can have a short range or disastrous effect in the arctic. Examples will be offered on the individual, squad, regiment, and division levels.

Pvt John Doe, engaged in a fire fight at 50° below zero, dives for cover and loses his arctic mitten. He is forced to proceed onward. Three facts quickly become self evident: First, his combat effectiveness as a rifleman has now sunk to about 10 per cent. Second, had he been properly trained or properly supervised by his squad leader, his mitten would have been fastened to his parka or to a string and he would not have lost it. Third, unless the supply echelon of his unit is functioning properly and the mitten can be quickly replaced, Pvt John Doe is likely to become a frostbite casualty.

All tank crews have been instructed to remove packed snow from the suspension systems at each halt. (It is 40° below zero with a 30 mile-per-hour wind blowing.) One crew neglects this preventative step and a track is thrown. Under the existing weather conditions it is necessary to construct a tarp shelter for working on the track. All in all it takes about five hours to get the job done. In the process the crew becomes thoroughly chilled. Through a

deficiency in command and discipline this tank is out of action all day.

A regimental Class III supply dump is poorly located in an area subject to snow drifts. A severe wind comes up and the snow starts to drift. No one needs the fuel at the moment so nothing is done about it. Four days later the forward dumps are exhausted, the regimental dump is covered with six feet of hard wind-packed snow, roads to division are blocked, and the weather makes supply by air impossible. For a period of 48 hours the forward units are without fuel and the ordeal causes as many casualties and is as hard on personnel as a tough 30-day campaign.

Pack ice was crushing *USS Sennet* when icebreaker *Northwind* came to the rescue



A division is making a combined motor and foot march at 50° below zero with a strong wind blowing. They are only making a move of five miles but it is along a single road and the division G-3 and motor transport officer have failed to make any plans or set up any schedules. All units struck camp at dawn and 75 per cent of the units are forced to stand waiting while some other unit clears the road. Frostbite casualties among the units that have to stand and wait over three hours run 10 per cent.

In general, arctic operations are characterized by lack of roads, lack of local resources, great distances, big increases in supplies, great difficulties for all kinds of land movement, and considerable hardship on personnel. In particular the judgement of the arctic is swift and harsh on the inefficient, the weak, and the stupid.

Logistical Limitations on Size of Arctic Operations

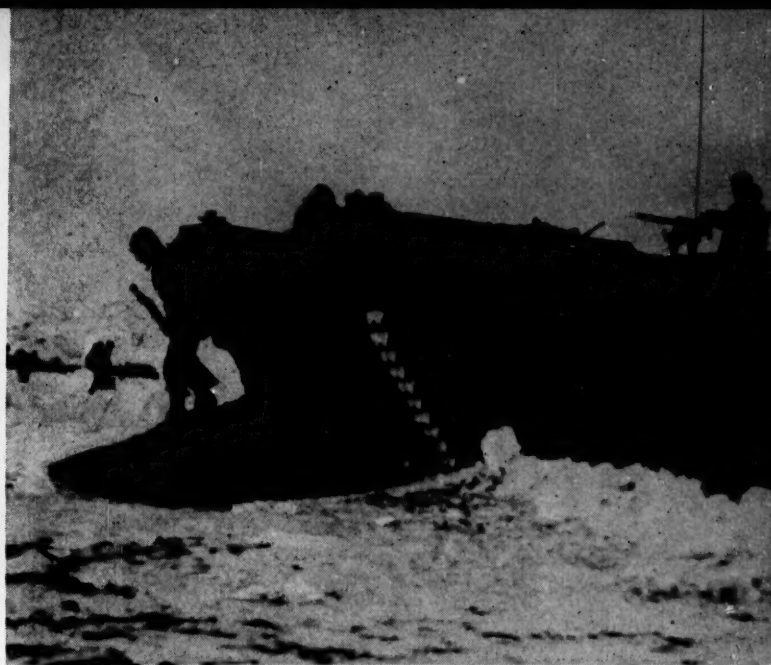
AS THE HEAD OF ONE of our big military research programs said recently, "Nothing is impossible, but some things just require more effort than they're worth." It would not be beyond our long range capability to maintain 10 or even 20 divisions in combat on the center of the arctic ice pack in the midst of the Arctic Sea. However, if it required 50 per cent of our national industrial effort to do it, the objectives to be gained would have to be of a most unusual nature to make it worthwhile.

Recent arctic experimental operations have given factors ranging from 4 to 9 by which normal supply and maintenance support must be multiplied to handle the conditions of climate and terrain found in the far north. From a logistical standpoint arctic operations could fall into four general classifications: (1) Those that could be supplied by ship. (2) Those that could be supplied by road, rail, and pipe line. (3) Those that must be supplied by air. (4) Those that must be supplied by over-snow vehicle and "cat-train."

Supply by ship is quite feasible during the summer months and even late into the fall in conjunction with icebreaker operations which have been extensively developed by the Navy. This will be covered in more detail later in this article.

Roads, railroads, and pipe lines can be constructed and maintained with tremendous effort in the arctic and sub-arctic. The Alaskan highway was made satisfactory for military traffic in about a year. To build, maintain, and repair roads under combat conditions where the enemy has an effective air capability is possible but extremely difficult in the arctic, though operations of greater than division size will require it.

Supply by air has, as in temperate zones, the following familiar associations: (1) Limitations on number of aircraft. (2) Limitations on the type of equipment that can be lifted. (3) Decrease in pay load when take-off fields are great distances from area of operations. (4) Bad



Hitting an arctic "beach"

weather conditions for a great part of the time during certain seasons.

Supply by over-snow vehicle or cat-train (long line of sledges pulled by tractors) is extremely slow because of the maintenance problems, and it becomes impracticable at ranges much over 100 miles because of the high fuel consumption of the "cat." For short range operations, where the cargo can be all pay load and the vehicles can return to the base for refueling, this is an excellent manner of supply. In addition, where the unit to be supplied is only a small outpost requiring nothing but food and small arms ammunition, this again becomes a practical method as long as the vehicles can carry the cargo plus the fuel for their own resupply. In an emergency, of course, practicality has no bearing and anything goes that will accomplish the mission.

Nature of Objectives in the Arctic

THE NORMAL OBJECTIVES of large scale military operations in temperate zones are absent here. There are no large population centers, no great communication hubs, no industrial complexes, no rich farm areas. There are mineral and oil resources but these are at present relatively undeveloped. With the tremendous difficulty of supply and the long lines of communication it is very unlikely that within the reasonably near future anyone will have an installation in the arctic that is worth committing more than a couple of divisions to take, or worth holding and immobilizing more than one division to defend. In the great majority of cases we will probably be dealing with much smaller units.

What then is the nature of the objective we might expect to find in an arctic war? Before we continue we must exclude the Soviet sub-arctic in both Russia and Siberia. Over the last 20 years there have been tremendous industrial and mining developments which present



The amphibious LVT is indispensable to arctic operations

the type of targets normally found only in temperate zones. In addition we shall exclude the dim and distant future when atomic energy power plants, underground cities, sun-ray condensers, and other Buck Rogers devices make the arctic "flower like the rose." In the realistic present and immediate future with weapons now in the hands of the operating forces or in the blue print stage, what kind of arctic ground installations would be of interest to us or to an enemy?

The present major strategic value of the arctic is tied

to one geographical fact. The shortest air distance or Great Circle route between our territory and Russian industrial complexes, and between Russian territory and our industrial complexes lies in most cases over the polar regions. For some of the central Siberian strategic industrial areas the polar distance is only about one-half the distance of an east-west route from bases we can expect to find in friendly hands.

What then are the arctic ground installations that might be associated with Great Circle strategic bombing?

1. The advanced fields for the bombers themselves for their last refueling.
2. Fighter strips along the route to give some escort.
3. Refueling plane take-off strips, if air to air refueling is going to be attempted.
4. Radar stations for both plane direction in the attack and for warning in the defense.
5. Fighter strips for defense.
6. Weather stations.
7. Guided missile director stations.

Icebreaker *Burton Sound* launches her helicopter to scout for leads through heavy pack ice



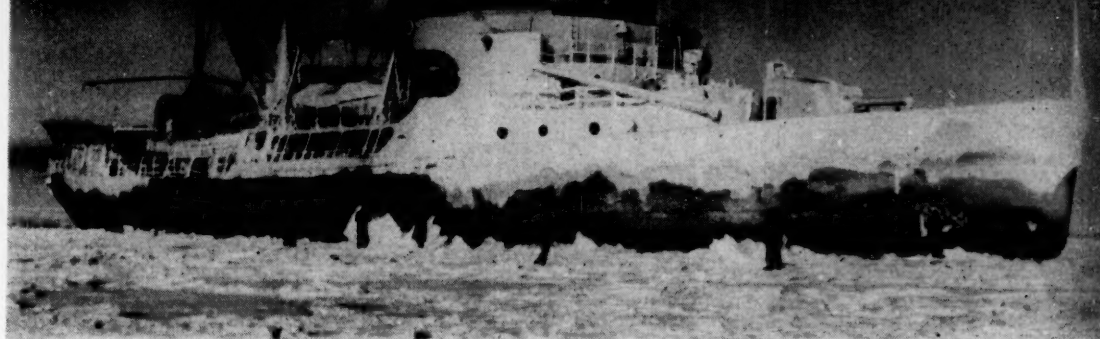
8. Arctic bases to supply and protect the above.

Naval Considerations off the Arctic Sea Frontier

THE UNITED STATES Government has long been interested in the exploration of the frozen extents of the polar regions. The Navy has shared this interest by actively participating in several operations and by supporting explorations of private or non-Navy organizations. The earliest of the Navy expeditions was one led by Lt Wilkes in 1838 to explore Antarctica. The most well known of the naval polar explorers is Adm Byrd, who commanded the Navy unit of the Navy-McMillan expedition to Greenland in 1919, and in 1939 led a largely government financed expedition to Antarctica. In 1947 the Navy carried out Operation Highjump, a large expedition to further explore the antarctic. Led by RAdm Cruzon, this large force was made up of an aircraft carrier, an amphibious command ship, two cargo ships, two destroyers, an icebreaker, a seaplane tender, a submarine, and transport and helicopter-type aircraft.

In addition to the above explorations the Navy obtained much experience operating in these waters during the last war and has for several years gained experience operating in arctic waters in resupplying naval installations at Point Barrow, Alaska. Based upon these experiences, then, what are the possibilities of conducting amphibious operations in arctic or antarctic waters?

THE MOST SEVERE COMPLICATION facing the execution of an amphibious operation is ice. At first glance one might think all ice is alike. Such is not the case. Before going on we might point out that the sailing directions for Alaska list 110 different terms and their definitions when speaking of ice. Fear not, you will be burdened with but a few of them. Icebergs are familiar to everyone but not familiar perhaps is the fact that the iceberg of the antarctic, eastern arctic, and Alaskan arctic are not alike. Bergs of the antarctic are formed from shelf ice, are rather large in area, have generally flat tops and vertical sides. They rise out of the water some 40 to 200 feet and extend in length from a few hundred yards to over 50 miles. Bergs of the eastern arctic are of glacial origin, flow directly with the ocean, and therefore are irregular in shape and size. In the navigable waters of the Alaskan arctic, icebergs are generally not found as the shallow



USS *Burton Sound* can plow through nine feet of pack ice

water holds them far off shore in the impassable ice pack.

The movement of vessels through waters infested with icebergs must be made with caution as icebergs may extend several hundred feet out of the water and at least two or three times that far below the surface. Further, the underwater area of the berg is larger than that portion visible. It is for this reason that vessels should not pass too close to them.

Considering the ice itself, we find the ice in the eastern arctic and antarctic somewhat similar. It is ice generally not over two years old, white, comparatively soft, and loose in nature. For a description of the ice in the Alaskan arctic, a statement made by the commanding officer of the icebreaker ship *Burton Sound* is quoted: "There is no question about the fact that the arctic pack ice in this area is much harder and denser than the antarctic pack. Up north when the ship hit the ice it was somewhat like hitting floating concrete blocks. The ice is old, weatherbeaten, dirty, hummocky, hard, tough, but brittle, whereas in the antarctic it was found to be white, relatively soft, and bearing little evidence of surface melting."

Ice presents three dangers to ships attempting to pass through it. First, there is the ever present danger that the ship may be crushed and sunk. Second, the ship might be carried into shallow water and grounded; or third, it might be frozen in the ice and carried about in the ice pack for years. Ships have been lost because of all three dangers. Perhaps the most notable example of a ship being caught in the ice and imprisoned for two winters, was the *Jeanette*, under the command of Lt G. W. De Long, USN. De Long intended his ship be caught in the ice and be carried during the winter to the northwest, believing that the next summer his ship would become free of the ice and in the eastern arctic, having made a "northwest passage" of Siberia. His ship



When snow and ice stop vehicles, men on skis still push on

became frozen in, did not become free the first summer, remained frozen in the second winter, and in the second summer the ice crushed and sank the ship. In getting ashore in boats some of the crew were lost. De Long with another part of his party made it to the Lena River in Siberia and subsequently perished. One group was discovered by friendly Eskimos in the Lena River area and were rescued. The terrible privations suffered by De Long and his 11 companions on the *Jeannette* are most vividly described in the book *Hell on Ice* by Comdr Ellsberg. Although De Long intended that his ship be frozen in, the fate of the *Jeanette* could happen to any ship inadvertently caught in the ice.

To further complicate movements through the ice, fog and periods of low visibility frequently cause ships to proceed very slowly or to lie to. Radar is a valuable aid in tracking the movements of ice, but it cannot always be entirely relied on. In areas near the coastline when the coast is low, further difficulty is experienced in distinguishing between ice and the land. In some areas the fathometer is of little use because of the lack of soundings on charts, and the shallow soundings will not always indicate when a land mass is being approached.

Based upon experiences gained in operating in polar

waters, let's consider how we might make an amphibious operation in areas where ice is to be met.

In planning the operation we might certainly expect to review previous operations in the area in order to get an idea of just where and what type of ice we were to meet, as well as where we might find open lanes or leads through the ice. This however is not the case. Quoting a statement made by the commanding officer of the *USS Burton Sound* after operating in the Alaskan arctic: "One thing appears certain, and that is that it is

impossible to predict open areas and ice conditions from one year to the next. No plans can be formulated in advance of the approach to an ice pack and be expected to be carried out one hundred per cent. Ice reconnaissance weeks in advance can tell nothing about how the conditions are going to be when the pack is actually encountered. Assumptions can be made of the penetrability of the pack but only actual contact with the pack will tell whether you will get through or not." We therefore find that information from previous operations does not help too much and that ice reconnaissance by long range aircraft several weeks ahead of an operation is of little value. We therefore find it necessary to plan for an operation as if we will have to break a way through the pack.

The normal types of amphibious vessels could be employed, however the hulls of the ships would have to be internally reinforced. Landing ships would require external reinforcing at the bows. All ships should have their bronze propellers replaced by steel propellers as the latter are able to sustain greater punishment from the ice. Ice-breakers must also be included in the force. Their broad beam, flat bottom, and power make them ideal "path-makers" through the ice fields. A survey ship is necessary as most polar waters are poorly charted and where

Danger is multiplied in the arctic, even for the frogmen who live with danger



the water is shallow the bergs and ice fields gouge out and fill in the sea bottom, constantly changing the depth of the water. Long range patrol planes are useful for ice reconnaissance ahead of the force. Helicopters, carried on icebreakers, are invaluable for scouting close ahead of the force in seeking leads through the ice. Last, but most certainly not least in importance, the services of an ice pilot familiar, through years of experience in an area, with the ocean currents, weather conditions, and ice itself, is invaluable.

In operating in areas where we are to encounter pack ice enroute to our objective, it seems most likely that a force of amphibious ships would be small with a resulting small landing force. As many polar land areas can be reached by ships for only a few weeks of the year, further limitations are placed on the size of the force that can be landed, as their logistic support for possibly a year would have to be landed with them. The scale of such an operation would be limited to seizing or destroying enemy installations such as radar or weather stations or to implant such installations ourselves.

Logistics on an Arctic Beach

THROUGH A SERIES of cold weather operations both in the arctic and antarctic, we have learned through the trial-and-error method a great deal about handling supplies in these regions. It has been determined that the doctrines which apply to other unloading operations are valid in cold areas. However, the temperatures and conditions present dictate new techniques. Under summer conditions most of the arctic presents the problem of operating over muskeg. If you will apply our usual landing procedures to an extremely muddy area you can visualize the problems to be solved. In the winter, different conditions apply.

When there is shelf or bay ice available and it is not



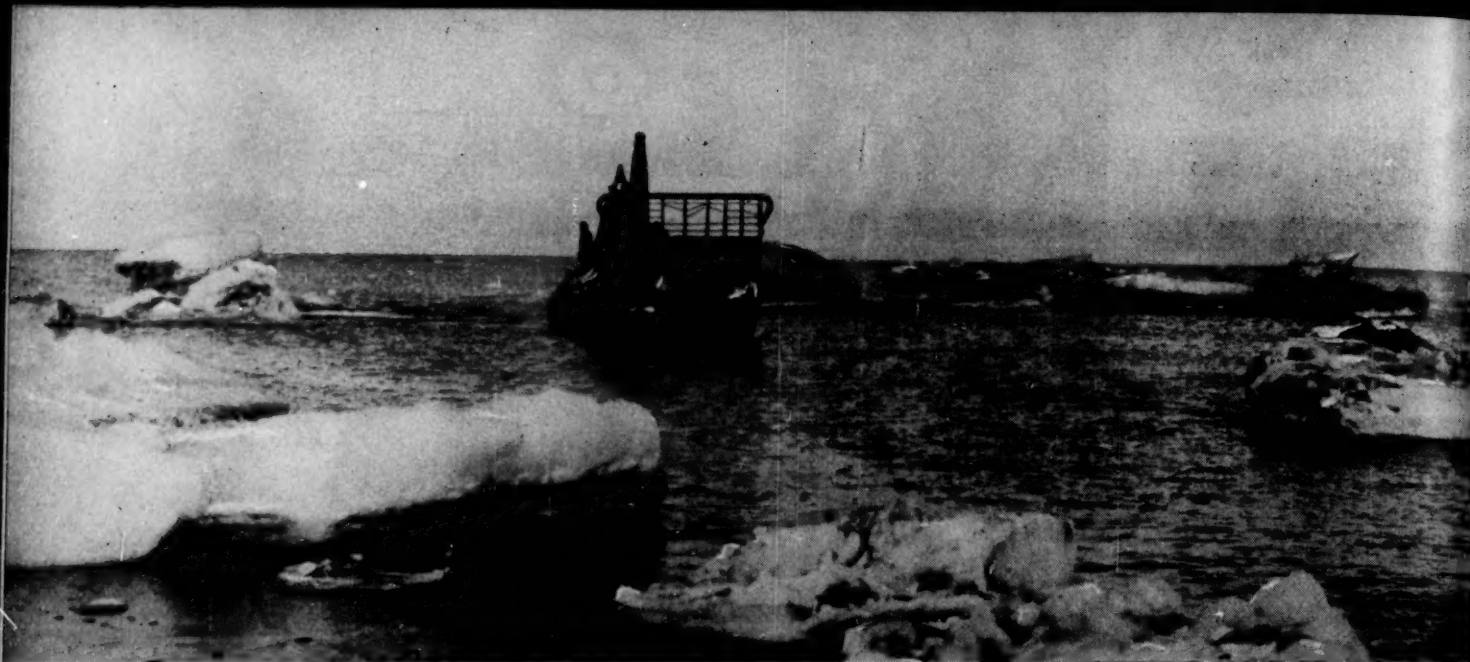
A thrown track in sub-zero weather can be disastrous

higher than the decks of the ships, it is possible to moor APA and AKA vessels alongside of the ice. "Deadmen" are used for mooring and the ship is warped alongside the ice which acts as the dock. Fenders or "biscuits" are required to prevent the ship from being holed. When



In arctic warfare, man's worst enemy is the cold

the ice is covered with snow, matting may be used to furnish hard-stand and roadways. Heavy equipment should be landed as far out as the ships' booms will reach and supplies must be moved off the ice to the camp area as fast as the supplies are unloaded. The principle is that weight cannot be allowed to build up on the ice as there is danger that the ice will break off or "calve." In the case of landing ships, ramps can be prepared, by blasting or by use of engineer equipment, which will allow unloading through the bow. In both these pro-



There always seem to be natural hazards to a landing—coral reefs in the Pacific, ice in the arctic

cedures it is important that over-snow vehicles (LVTs, Weasels, or snowmobiles) are deck loaded so as to be available for early discharge. The vehicles will be used for reconnaissance and for logistical purposes. Engineer equipment must also be loaded so as to be available early in the unloading period.

✿ WHEN BEACH UNLOADING is to be used, reconnaissance must be conducted to determine the suitability of the beach and the ice conditions. Helicopters have proven excellent reconnaissance vehicles in cold weather operations. LVT and landing craft are used in the conventional manner but when certain ice conditions are present, ramps may have to be prepared and ice cleared. The

arctic contractors at Point Barrow have been carrying supplies over beaches for the past several years and have experienced no great difficulty.

Of course we are going to need our shore party to perform its normal functions. In these areas of low temperatures, with the attendant lowering of human efficiency, we will depend upon our materials-handling equipment (winterized, of course) to make up for this factor. Machines can stand cold better than humans; furthermore, they can speed up the operations by bulk-handling. In spite of the extensive use of machines, men will have to be exposed to the cold to operate them. Good cold weather clothing, high caloric rations, and warming tents will keep up human efficiency. Wanigans (covered and heated huts on sleds) will be used for the care of workers.

A system of traffic control will have to be used to get maximum efficiency of our limited transportation. Remember, we have to move supplies from the ice at the same speed that they are being unloaded. Traffic control posts between the unloading area and the base camp will be required. Maintenance of this equipment will have to go on; heated maintenance areas, tents, beached landing ships, or huts will have to be used to protect the machines from the cold. Recovery vehicles will be required for the recovery and repair of disabled

Tank retrievers get a good workout in the arctic





Supplies must be moved off pan ice as fast as they are unloaded

vehicles or for those that go through the ice or permfrost, or that fall into streams or muskeg. Sufficient spare parts will have to be carried along to insure that all vehicles and equipment will be operable throughout the operation.

It has been said that 90 per cent of a cold weather operation is logistics. From the minute that you land in the arctic you will be convinced that this is so.

The Marine Corps and Arctic Warfare

THE MARINE CORPS IS PECULIARLY SUITED for handling arctic operations for the following three reasons:

(1) Arctic operations will probably be small operations. In many cases they may be a series of semi-independent actions of regimental combat teams or even battalion units.

(2) The Marine Corps with its organization, equipment, and tactical doctrine slanted toward the lightness and flexibility of amphibious landings is ideally suited for operations where heavy equipment cannot be brought in. Supply by air almost precludes the extensive use of heavy artillery or armor. Marine emphasis and proficiency in close tactical air support on a small unit level makes an adequate substitute for the other arms.

(3) The considerable effort required to train, transport, and equip a man for the arctic, plus the tremendous logistics effort to supply and maintain him, plus the trouble to evacuate him should he prove a casualty or be physically or mentally unfit, makes it well worthwhile to screen all officers and men who cannot pull their own weight. The Marine Corps' repeated demonstration of the high quality of its enlisted men and the excellent discipline and leadership found in its small units makes it ideally suited for a terrain where the characteristic action will be by small isolated units under conditions of extreme rigor for personnel and equipment. USMC



"75s Up"

By 1stLt Earl R. DeLong



☛ HOW MANY OFFICERS AND MEN OF THE CORPS KNOW that the regimental antitank company has a tank platoon? Infantry officers have been surprised to learn that the tanks supporting them in the attack have been, on various occasions, tanks belonging to their own regiment.

I am writing this article expressly to enlighten those members of the Corps who have not had a chance to become acquainted with the antitank company in combat.

For security reasons the T/O will not be presented in detail and the equipment organic to the company will be mentioned only in general terms.

Motor transport organic to the company consists of the following types of vehicles:

Truck, 2½-ton, 6 x 6, cargo

Truck, ¼-ton, 4 x 4

Trailer, ¼-ton, 2-wheel, cargo

Trailer, 1-ton, 2-wheel, water, 300-gal.

AN/MRC-7 (¼-ton radio jeep)

The tank platoon has M-26 Pershing tanks which are equipped with the powerful 90mm guns, and our recoilless rifle platoon has the 75mm recoilless rifles and carts to carry them. The antitank company also has rocket launchers, light machine guns, and the .50 cal. machine gun. All in all, the firepower of the company is terrific.

A brief description of the communication equipment will round out the major items remaining to the company. As already mentioned in the description of the motor transport, there is a ¼-ton radio jeep which is referred to as the AN/MRC-7. In addition to this item of signal equipment, the following communications are also in the company:

SCR-300 radios

SCR-510 radios

SCR-536 radios

TBX-8 radio

EE-8 telephones

Now that we have a working knowledge of the company and its equipment, let's see how the company operates under present combat conditions. The Korean cam-

Only three years old and about half as big as a rifle company, the Antitank Company has proved in Korea that age and size aren't everything. Armed to the teeth, the outfit already packs a terrific punch, but the author believes it could be still more powerful

paign has been a severe test of both the tactics and the equipment of the Marine division, and it is reasonably safe to say that the antitank company has had a good workout during the fighting.

In discussing the employment of the company during combat it is perhaps wise to separate the unit into its three main components and individually explain their functions.

The company is an independent administrative unit of the regiment. As a separate company it functions much the same as a battalion. During combat the company maintains its own separate command post complete with supply dump, motor transport pool, and complete communication net. Normally its CP is situated as close to the regimental CP as the terrain and tactical situation allow. This is necessary because the company commander, as regimental antitank officer, must be fully aware of the regimental tactical situation at all times and must be available to present recommendations to the regimental commander. Establishment of roadblocks is one of the major responsibilities of the company, and the company commander must constantly be revising his antitank defense plans as the attack progresses. This in itself dictates that he must make reconnaissances, and therefore poses a problem as he still must be available upon the first call from regiment for new roadblock recommendations. This brings up the subject of communications within the company.

The company guards three radio nets during field operations; they are the company tactical, the regimental tactical, and the regimental command net. Also, the company commander has the AN/MCR-7 radio jeep for contact with his company while conducting a reconnaissance. The basic or primary net is, of course, the company tactical net. This consists of the SCR-300 radio. Despite the mountainous terrain over which the Korean campaign has been fought, this radio has been quite efficient. By means of the company tactical net the

ILLUSTRATED BY CPL ROY THOMPSEN



company commander can control his two platoons or, if he so desires, individual tanks or 75mm recoilless sections. During the early operations around Seoul-Uijongbu, the company installed the SCR-510 radios in the jeeps of the company commander, the tank platoon leader, and the 75mm platoon leader. This was done so that the company commander, while conducting reconnaissance, could maintain communication with all units. Theoretically, this arrangement allowed for rapid deployment of all units for antimechanized defense. In reality, the opposite proved the case due to the fact that the SCR-510 radio was mechanically deficient. The constant jarring motion of the vehicle repeatedly threw the radio off its assigned frequency. The SCR-300, when installed in the jeeps, proved a very effective source of communication and was therefore substituted for the SCR-510.

Normally the 75mm platoon's sections are attached to the assault infantry battalions and consequently receive their logistical support from the battalion to which they are attached. However, the tank platoon is usually in direct support and therefore requires full support from the company. In discussing the employment of the two platoons, more will be said later regarding the various logistical problems pertaining to the individual units. As mentioned above, the common practice is to attach one 75mm recoilless section to each of the two assault battalions. The battalion normally keeps the section in mobile reserve for fire against armored vehicles, pillboxes, and targets of opportunity beyond the range of the battalion's organic weapons. During the establishment of roadblocks there has been some tendency to place the recoilless rifles in the forward elements of the position, thereby needlessly exposing them to the fire of the enemy during the hours of darkness. This was particularly true in the early days of the Korean campaign.

The division tank battalion's primary mission is to render full support to the infantry regiments. Antimechanized defense, as a primary mission, is assigned to the tank platoons of the three antitank companies. However, due to the scarcity of enemy armor encountered in Korea these platoons have gradually changed their primary mission to that of direct support of the rifle companies in the assault and have relegated antimechanized defense to a secondary mission. The theory

that a tank is the best defense against another tank still holds true, but, and this must be emphasized, there are other regimental weapons available that, when properly employed together with artillery and naval gunfire, will successfully repel an armored attack. The 3.5-inch rocket launchers and the 75mm recoilless rifle will knock out a medium tank with little difficulty.

BECAUSE OF THE NATURE of the terrain over which the division operated during the Wonsan, Hamhung, Chosin Reservoir campaign, only a limited number of tanks were used by the division during the period. As the 7th Marines' tanks were not included in this number, the following remarks apply only to the platoon's actions during the Inchon-Seoul operation.

During the early days of the Inchon-Seoul operation the platoon served mainly as part of the antimechanized defense. The regiment's main mission at the time was the protection of the division's exposed left flank. This was accomplished by occupying all the key terrain features and establishing strong roadblocks at all routes of communication leading into the regiment's sector. The platoon normally was split into sections and deployed at the most likely avenues of approach for enemy armor. With the exception of individual tanks occasionally accompanying company-strength combat patrols, the platoon's actions were confined to passive measures.

Subsequent to the fall of Seoul, however, the 7th Marines was assigned a more aggressive role. Its mission was to seize the important road hub of Uijongbu which lies approximately 11 miles northeast of the Korean capital. Speed was an essence as the retreating Reds were withdrawing as rapidly as possible by means of the

When enemy armor is scarce, regimental tanks add their weight to the assault





Regiment has a tough time resupplying its tanks

the battalions a great portion of the time and as such are logistically supported by them. Nevertheless, this does not relieve the company of the responsibility for maintaining a half unit of fire for *all* weapons at *all* times.

Due to the initiative and skill of the maintenance personnel, the platoon had great success in repairing minor mechanical malfunctions and was generally able to keep all tanks operating the majority of the time. Major mechanical faults were, of course, beyond their capabilities because of the lack of heavy maintenance equipment. This posed a severe problem under actual combat

conditions. Tanks are temperamental and after prolonged operations need complete overhauls. The division antitank platoons are not serviced by the tank battalion but by the ordnance battalion. Generally, the only time the tank battalion has direct contact with the platoons is when they are attached for transportation over great distances. Because of this lack of association, the tank battalion is not prone to lend a helping hand in time of distress. In order not to create an erroneous impression by this statement, let me clarify it.

❖ ASSUMING THAT THE TANKS have just been overhauled and are in good operating condition, let's engage them in a fire fight on a strong defensive position. Suppose a tank "conks out," throws a track, or does any of the many things that the fickle monsters take delight in doing at the most inopportune times? How is the company to retrieve said tank? Tow it with another tank? A sound suggestion normally, but we must remember that the hydraulic system of the M-26 Pershing is not designed to take such wear. Ah, a bulldozer or better yet a tank retriever! Unfortunately, the company's T/E does not include such an excellent piece of equipment. Borrow it from the tank company attached to the regiment? Now we come to the reasoning behind the statement that the tank battalion is not usually a good samaritan to the antitank platoons. The attached tank company commander has approximately 20 tanks to nurse through an operation. To dispatch his retriever to the aid of another unit, perhaps miles away, seriously weakens his own combat efficiency. Through his own personal generosity he may consent to do it once, or even twice, but thereafter

Seoul-Uijongbu artery. Its seizure would deny them this avenue of egress and would trap sizeable units. The 7th's CO, Col Homer L. Litzenberg, elected to strike due north on the Seoul-Uijongbu road with a strong armored force acting as point. In order to have the maximum firepower in the leading elements, the tank platoon was attached to the company from the division tank battalion. Although responsible for the logistical support of the platoon, the company commander requested that this support be supplied by the antitank company. The tank company commander's organic motor transport was under battalion control and it was believed that the transportation available to him was not capable of sustaining both his own tanks and those of the regiment.

The resulting heavy fighting of this period indicated several weaknesses in the antitank company's T/E. The primary weakness is the company's lack of heavy transportation. One truck must be constantly utilized as a fuel truck. By carrying approximately 13 drums of gasoline and two of lubricants it is possible to keep the fuel problem licked; however, to do so requires the truck to be shuttling back and forth to the division fuel point. When the platoon is operating daily over a prolonged period of time the regiment cannot supply it plus its own organic transportation with fuel, hence the lengthy trips. Insufficient transportation is left for ammunition resupply of the 75mm recoilless rifle platoon. Visualize even a half unit of fire for several .30 cal. machine guns, .50 cal. machine guns, 90mm guns, recoilless rifles, 3.5-inch rocket launchers, together with ammunition for individual small arms. You can readily see the weakness in the company's motor transport. True, the 75s are attached to

he will politely but firmly inform you that his retriever is not available. You can't find fault with him over the issue when you look at his view of the situation. The inability of the antitank company to retrieve disabled tanks and to conduct major maintenance repairs is a weakness that must be remedied if we insist on keeping the platoon in the company.

During the platoon's combat north and west of Seoul the unit had no encounter with enemy armor but did conduct extensive operations in direct support of various rifle companies of the regiment. As mentioned earlier, the platoon did not accompany the regiment beyond Hamhung due to the lack of suitable terrain over which to operate. We will once again discuss this unit at the conclusion of the article, so let's now briefly review the capabilities and limitations of the recoilless rifle platoon as based on combat experiences in Korea.

The 75mm recoilless rifle is a portable weapon designed to be fired from the machine gun tripod. It is an air-cooled, single loading weapon using fixed ammunition. It could also be safely stated that this rifle is the finest infantry weapon adopted by the Corps since the days of "ye olde flint lockes." The recoilless rifle has achieved wonderful results during its initial use with the Corps and it is to be hoped that the number allotted the division will be increased in the immediate future. Because of its extreme mobility the recoilless rifle is what every rifleman desires—artillery direct fire at ranges where misses are improbable!

As previously mentioned, the recoilless rifle platoon's two sections are normally attached to the assault battalions. Occasionally the entire platoon is in direct support of the leading battalion when the regiment is attacking in a column of battalions. Tactically this is not a sound proposition; however, this formation was quite often forced on the regiment because of the mountainous terrain.

Although a unit of the regimental antitank company, this platoon soon discovered that its main mission was not that of antimechanized defense but that of direct support of the infantry. The great preponderance of its combat was of the latter nature with only a few engagements with enemy armor. Regardless of the type of opposition taken under fire, the recoilless rifle possesses a tremendous wallop and when properly employed will materially aid the riflemen in reducing the strongest position or destroying an enemy attack.

Prior to its baptism by fire there were a number of opinions circulating to the effect that the weapon's back blast would draw strong counter-fire, and also that its crew was dangerously exposed to enemy fire. It was argued that the damage to the enemy would not compensate for the losses to our own troops. This did not prove to be the case in Korea. Over a period of six months

the company's losses were unbelievably small and, it might be added, the sections were in the brunt of the fighting as much if not more than the average infantry company of the regiment. The infantry will undoubtedly release howls of anguish at this statement, nevertheless facts will substantiate this remark. With the old standby "two up and one back" the battalions could look forward to a well earned rest by a relief from the reserve battalion. Unfortunately, with only two sections to the company the recoilless riflemen merely remained on their positions, uttered a few choice terms, and when the relief was completed once again jumped off. The few casualties suffered by the company were not inflicted at any time as a result of counter-battery fire on the firing positions. During the entire campaign the author can't recall any fire that justifiably could be called counter-battery fire. This could be attributed partially to the fact that the enemy was denied an extensive use of artillery by our air and also that his use of mortars was limited by his ammunition supply problem. In future conflicts with a major foe the use of counter-battery fire will be tremendous in comparison with what the division encountered in Korea. The selection of firing positions also contributed to the scarcity of this type of enemy fire. By firing over the crest of a ridge line the crews were able to conceal the back blast from the enemy.

THE PLATOON'S EFFECTIVENESS is somewhat limited by its lack of transportation. It was our practice to assign one jeep and a ¼-ton trailer to each squad, and at first glance this would seem more than sufficient. However, after loading the gun, mount, machine gun cart, and approximately 20 rounds of ammunition the trailer was carrying a load double its capacity! Of course Joe Ammunition will slip on a couple of extra rounds "just to be on the safe side." Some other agent will decide a few additional boxes of grenades will come in handy and before the squad leader realizes what has transpired, the trailer is hauling a 2½-ton load on springs that were designed for a maximum load of ¼ ton. Needless to say, this causes frequent breakdowns and, more important, the ammunition, including Joe's contribution, is still not sufficient for an engagement of several hours' duration.

Other than the problem of motor transport it seems as if the present T/E for the platoon is sound.

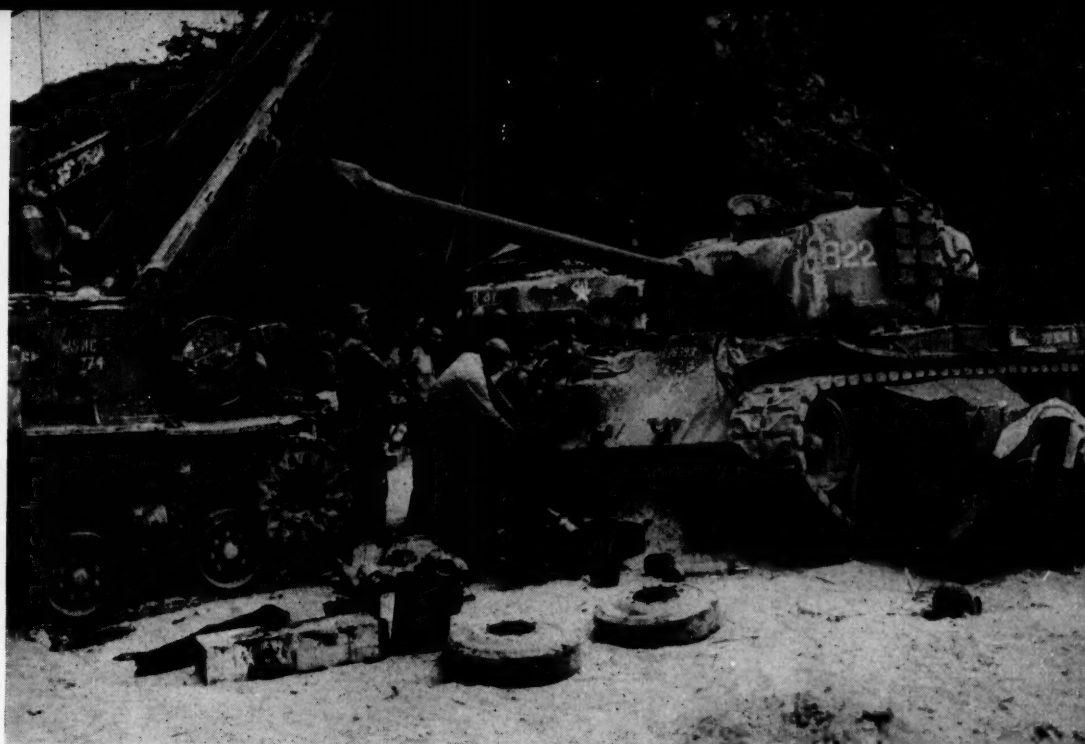
In order to clearly present the capabilities of this weapon and its importance to the infantry I will describe, in general terms, several situations in which the weapon performed both its support and antimechanized missions.

In the early part of November the division had orders to seize the Chosin Reservoir. The 7th Marines was the assault element on 4 November when the following incident took place:

The regiment was advancing along the road towards

Koto-ri, against slight opposition, with a platoon of the division reconnaissance company acting as point, followed by the recoilless rifle platoon and the 1st Bn in that order. (See map below.) The 2d and 3d Bns were acting as flank guards on the high ground on both sides of the valley. The rear was brought up by the regimental train. At approximately 1400 the leading elements were at Point B and the 75 mm platoon was at Point A when a freakish bit of good fortune averted what would have been a grave situation.

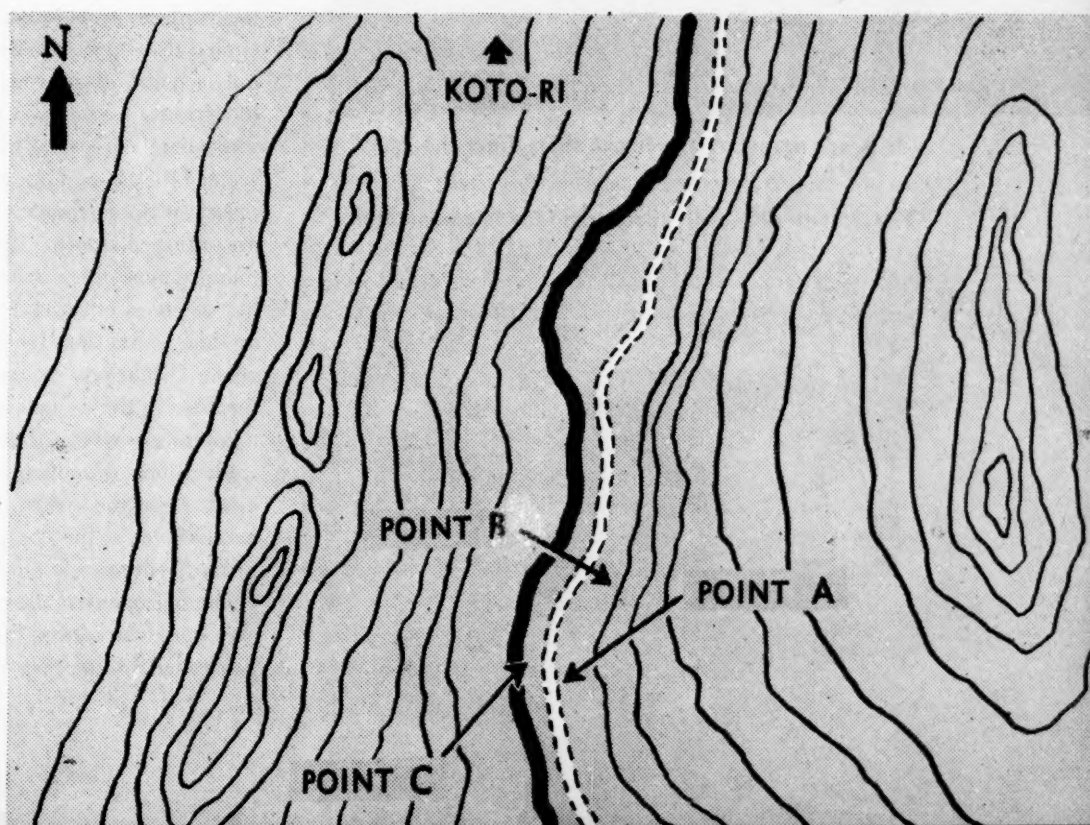
A rifleman had leaned his weapon against some brush at Point A to readjust his equipment. When ready to again assume the march he reached for the rifle and in so doing dislodged some branches that were concealing a T-34 tank! After sputtering for a few moments he managed to sound off and all hell broke loose! As it was imperative that the rifles be placed in action at once, the platoon learned here that it was not necessary to remove them from the carts in order to fire. At a range of 20 yards the first section went into action and destroyed the tank within 30 seconds. While this tank was burning, a second one, concealed at the base of the high ground, was discovered. The range to this target was approximately 50 yards. This tank was also taken under fire by the section and it too burst into flames. During this action the platoon leader, 1stLt Raymond J. Elledge, had the presence of mind to deploy his second section in the river bed at approximately Point C. It was fortunate he did so as two additional tanks started from their concealed positions at Point B and advanced south towards the action. The section engaged them from the flank at ranges of 75 to 100 yards with AP rounds. In a matter of minutes both tanks were burning furiously. The total action lasted only four



When the tank platoon needs a retriever, it has to borrow one

or five minutes. As the two leading tanks' turrets were trained in against the hill, the platoon was able to eliminate them before they could get into action. If this had not been the case the friendly units' positions would have been extremely precarious. As it was, and this is most amazing, not one single casualty was inflicted by the tanks.

☛ THE ENEMY VIOLATED one military axiom—to cover obstacles with fire. He had only a few riflemen protecting the tanks with long-range, ineffective rifle fire. Fortune again smiled on our forces when the recoilless rifle pla-





"The second round went through the embrasure"



"It is not necessary to remove them from the carts"

The 75mm rifle will knock out any medium tank



toon was located at the scene of the action with its full firepower available for concentration at point-blank range. If these tanks had not been detected and if the platoon had not been so ideally located, the destruction in the regimental train would have been tremendous as there were no places in the road wide enough for the vehicles to turn around. The actions of the platoon leader in quickly analyzing the situation, of course, is not included under the heading of good fortune, but rather under sound training and presence of mind.

✿ EACH OF THE FOUR MEDIUM TANKS had been struck several times and all hits penetrated the armor plate, including the thickest armor around the turret. Previously the platoon had destroyed a T-34 tank during another engagement. During the northern campaign the platoon engaged only five tanks and had a score of five kills—all hits, no misses, no errors. The weapon is fully capable of destroying any medium tank that exists today. The related incident clearly indicates that as an antitank weapon it has no peer among all the weapons that are handled by the infantry.

On several occasions the platoon demonstrated that the recoilless rifle is indispensable if we wish to have a well balanced, hard hitting, infantry team. Because of its construction it can be taken wherever the riflemen go. The most rugged terrain in Korea posed a challenge to the crews' stamina but at no time did it present an insurmountable obstacle. Due to its extreme mobility and striking power it has been able to produce wonderful results as a close support weapon. Its amazing accuracy is attributed to its lack of recoil and well trained gunners.

The following incident is typical of the close support missions the weapon was required to perform: George Co had orders to seize a key terrain feature that was occupied by approximately two enemy companies. The only avenue of approach dictated that the attack consist of a frontal assault. George Co jumped off on schedule and immediately received intense small-arms fire; the fire seemed to be coming from three covered machine gun positions approximately 200 to 300 yards in front of the assaulting platoons. Because of the peculiarities of the mountainous terrain both artillery's and air's ability to hit a pin-point target was extremely limited. It was an ideal situation for the employment of the recoilless rifle. The heavy enemy fire made it impossible to place the rifle in the assault platoons' areas. While conducting a reconnaissance in search of a firing position, the squad leader noticed a likely spot on a hill approximately 800 yards from the enemy. In view of the small size of the emplacements, the company commander took a dim view of the position selected by the sergeant. The squad leader, having assured the company commander that the mission could be successfully carried out from that position, proceeded to do just that. The first round fired after



"Delete the tank platoon . . . a platoon of jeep-mounted '105s' will more than fill this gap"

the initial estimate of the range fell approximately six feet short. The second round went through the embrasure of the emplacement and destroyed same! The two remaining positions were eliminated with the next two rounds. Incredible? Yes. Unbelievable? No. Needless to say the position was in George Co's hands before night fell. It is possible to cite other incidents when the recoilless rifles were instrumental in turning the tide of battle. An indication of the riflemen's feelings for the weapon was the increasing cry "75s up" as the intensity of the campaign increased.

THE FOREGOING STATEMENTS have been advanced so as to present the limitations and capabilities of the company. The lessons learned in Korea indicate that the organization can be made to function. However, the author feels that it could be modified so as to create an even better, more powerful, and more flexible unit. Along this line there are three main recommendations. They are:

1. Create an additional platoon of 75mm recoilless rifles. By so doing, the offensive power is doubled and a stronger antimechanized defense is created by the coordination of their fire with the fires of artillery, air, naval gunfire, organic infantry weapons, and mine fields. It would also compensate for the loss incurred by the next recommendation.

2. Delete the tank platoon from the present T/O. As pointed out earlier in the article, it is extremely difficult for the company to function efficiently while maintaining both platoons in combat. Also cited was the lack of

proper maintenance equipment and the obstacles to be overcome when tanks break down and equipment with which to retrieve them is not available. The question may be asked "Won't this weaken the regiment's anti-mechanized defense to the danger point?" The answer is negative! As mentioned above, by the coordination of all available firepower the regiment can reasonably expect to destroy a moderate armored attack. There is no reason for a division to be surprised by a heavy armored attack if its reconnaissance agencies are functioning properly. The division commander, having been kept apprised of the situation by these agencies, will have ample time to deploy the tank battalion to meet the attack. If this does not present a sound argument let's reinforce it by saying that the addition of a platoon of jeep-mounted 105mm recoilless rifles will more than fill this gap; furthermore, it will not present as great a logistical and maintenance problem. The company has a motor transport maintenance section, so from that viewpoint it will present no difficulty.

3. In lieu of a 1/4-ton, 4x4 truck and a 1/4-ton trailer per recoilless rifle squad, it is recommended that a weapons carrier and a 1/2-ton trailer be substituted. This will enable the squad to transport its gear without impairing the serviceability of the transportation and will allow the unit to carry a sufficient number of rounds to sustain it in a supporting action of some duration.

The regimental antitank company has proved itself invaluable in combat. Let's make it even more useful in its job of direct support to the infantry.

USMC

Passing in Review

BOOKS OF INTEREST TO MARINE READERS

Marines at the Reservoir . . .

HOLD BACK THE NIGHT—Pat Frank. 210 pages. Philadelphia: J. B. Lippincott \$3.00



"These are not stragglers, sir. This is Dog Company." This was the reply by Sgt Echland after leading the last 14 men of Dog Company through a running fight from the Chosin Reservoir to the safety of the Korean coast in December of 1950—14 of the 126 men who started! Relying on guts, ingenuity, and professional knowledge these Marines would not admit defeat.

Pat Frank has captured the thoughts, anxiety, and even the humor experienced during the 1st Mar Div's epic attack to the south in December of 1950. He has painted the Korean conflict at the level of the small unit by drawing on the experiences of individuals.

Hold Back the Night is the story of Dog Co—or for that matter, any rifle company in the 1st Mar Div in Korea—and of a bottle of Scotch. From Capt Mackenzie, the company commander, who bore the responsibility for success or failure, down to Pvt Beanie Smith who had never learned what responsibility meant, these are Marines, fighting as only Marines know how to fight.

The bottle of Scotch is symbolic of faith, hope, and home. It is symbolic of the axiom "The difficult we do at once, the impossible may take a little longer." This particular bottle of 12-year-old was given to Capt Mackenzie in 1941 by his wife to be opened only in emergency—"when things get too rough." It aged through

World War II, the southern and northern campaigns in Korea—including the reservoir—and is still adding years.

Many readers may not care for the flash-back style narration, but in this instance the author has used it very effectively. Unless you have several hours in which to finish this book don't pick it up. For once started you won't put it down until you've turned the last page.

Reviewed by Capt W. T. Nietschmann

Lively History . . .

RAG, TAG AND BOBTAIL—Lynn Montross. 525 pages, illustrated. New York: Harper & Brothers. \$5.00

How often do the words "Revolutionary War" awaken unhappy memories of grade school! The early history of the United States, as faintly recalled, seems to have been woven of noble platitudes, resounding slogans, simple causes and effects—and a distasteful array of dates which time has quietly obscured. Nowhere, can we remember, did our early history instruction bring forth the impression of realism. Later in life, of course, came the realization that history was written by failure as well as success and that the characters involved were people with many of the same weaknesses as you and I. And yet by the time we had reached this stage of intellectual maturity there were other and more pressing things to worry about. Leisure reading was not often devoted to a subject so well sterilized in our childhood.

With these thoughts in mind it came as a singular pleasure to discover *Rag, Tag and Bobtail*. Here, fresh off the press, is a history of the Revolutionary War—not a history in the painful inert sense, but a vivid lively narration of our early years. Its pages are replete with details—not mere statistical analyses—but details which confirm the stirring realism of the events.

We learn, for example, that at the Battle of Pell Point, New York on 18 October of 1776 there were four Massachusetts regiments (13th, 3d, 26th, and 24th); that the largest had 234 privates and the smallest 179. Extracts from letters and reports are woven into the story of this minor battle to provide a clear and complete account. Then, lest we frighten those to whom military details are of little interest, we may mention the report of the Meschianza of 18 May 1778. This was a party given by

the British in Philadelphia on the occasion of Gen Howe's resignation. "The fete began on the river with a grand regatta of barges decorated with banners and pennants . . . a mock tournament took place between the knights of the Blended Rose and Burning Mountain. A lavish oriental touch was also provided . . . by attiring some of the ladies in rich Turkish costumes. Marines from warships



... appeared in blackface as Nubian slaves . . . etc., etc." These extracts should at least serve the purpose of revealing the fullness of *Rag, Tag and Bobtail*. The characters move through its pages as human beings—sometimes difficult to understand according to our modern concepts—but nevertheless always and ever real. A man is undecided in one incident and firm in another, even as all people live their lives.

The student will find a full and detailed bibliography as well as quotations in the text from numerous documents, letters, and reports. The abundance of detail facilitates the reconstruction of military operations. Further, the backdrop against which the tale unfolds is carefully prepared. Perhaps the best recommendation is the easy readability. Too often does a documentary text lose its appeal by hindering assimilation. *Rag, Tag and Bobtail* places instruction and entertainment in delightful balance.

Mr. Montross is not unknown in Marine Corps circles. His frequent contributions to the GAZETTE are well-known. Perhaps his leanings towards the Marine Corps may be best typified by his dedication of *Rag, Tag and Bobtail* to "my colleagues of the Historical Division, U. S. Marine Corps."

Reviewed by LtCol V. J. Croizat

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OF THE

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The period from 1 July 1951 to 1 July 1952 has shown tremendous gains in membership and reputation. For information of members the following financial report is submitted as of 30 June 1952.

Assets

Cash on hand.....	\$118,819.35
Accounts Receivable.....	4,311.86
Books	1,879.58
Stationery	2,617.19
Editorial Investments.....	4,741.50
Property.....	8,874.33
Postage Deposits, 1st Class.....	\$ 95.49
2nd Class.....	1,080.51
3rd Class.....	455.95
Meter	569.62
	<hr/> 2,201.57
Investments (U.S. Savings Bonds).....	66,760.50
Korea Reprints.....	825.93
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	<hr/> \$211,031.81

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Accounts Payable	\$ 817.94
Prepayments for Books.....	16.75
Unearned Subscriptions.....	162,236.75
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	<hr/>
	<hr/> \$211,031.81

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1 July 1951 — 40,015



1 July 1952 — 66,105



